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The correlation of personality factors with spiritual gifts clusters

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Andrews University, 1993

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Andrews University
School of Education

THE CORRELATION OF PERSONALITY FACTORS
WITH SPIRITUAL GIFTS CLUSTERS

A Dissertation
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by
Soo Dong Choi
March 1993

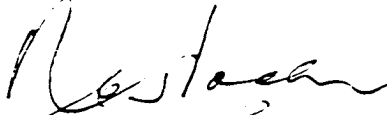
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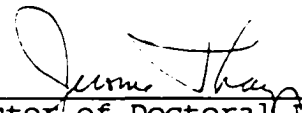
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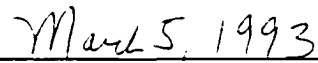

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Date approved

ABSTRACT

THE CORRELATION OF PERSONALITY FACTORS
WITH SPIRITUAL GIFTS CLUSTERS

by
Soo Dong Choi

Chair: Roy C. Naden

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: THE CORRELATION OF PERSONALITY FACTORS WITH
SPIRITUAL GIFTS CLUSTERS

Name of Researcher: Soo Dong Choi

Name and degree of faculty chair: Roy C. Naden, Ed.D.

Date completed: March 1993

Problem

Research had been undertaken to investigate the possible correlation between temperaments and spiritual gifts, and psychological types and spiritual gifts, but fewer correlations than anticipated were identified.

The purpose of this study was to explore hypothetical predictive models regarding the correlation between 16 personality factors and five spiritual gifts clusters.

Method

Two instruments were used to measure personality factors and spiritual gifts clusters: The Sixteen

Personality Factor Questionnaire (16 PF) and the New Spiritual Gifts Inventory (NSGI). 840 subjects were included in this study--students and their spouses of the Seventh-day Adventist Theological Seminary, Berrien Springs, Michigan, and undergraduate students of Philippine Union College, Silang, Philippines. Two null hypotheses were formulated and tested statistically by multiple regression analysis.

Findings

For the seminarian sample, personality factors H+, M+, and N+ predicted the teacher cluster; personality factors H+, Q₃+, B-, G+, and Q₁- predicted the shepherd/evangelist cluster; personality factors Q₄-, G+, B-, H+, O+, and Q₃+ predicted the supporter cluster; personality factors H+, Q₄-, and E+ predicted the counselor cluster; and personality factors H+, G+, O-, E+, and Q₃+ predicted the leader cluster.

For the Filipino sample, personality factors H+, Q₃+, F-, and A+ predicted the teacher cluster; personality factors H+, Q₃+, F-, G+, and A+ predicted the shepherd/evangelist cluster; personality factors Q₃+ and H+ predicted the supporter cluster; and personality factors Q₃+, H+, and O- predicted the leader cluster.

Conclusions

This study shows that personality factors may be used to predict probable giftedness. The fact that the best prediction models of the gifts clusters are unique for the

two samples implies that one cannot generalize findings cross-culturally.

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CHAPTER I

INTRODUCTION

Because of the need for a more comprehensive understanding of human nature than can be gained by the isolated study of one discipline, there have been many attempts in recent years toward greater interaction among disciplines. Psychology and theology have been affected by this trend, though this development has not always been welcomed by those concerned. Critics argue that Christians should not mix biblical remarks with modern psychology, because,

the two fields are so different that they have nothing in common and hence are irreconcilable. They represent Christian and non-Christian systems which have differing and at times conflicting assumptions, views of truth, sources of authority, concepts, and language. Psychology, it might be claimed, is a science; theology is a philosophical religious system. (Collins, 1981, p. 15)

However, theology and psychology have some subject matter in common and may offer some joint understanding to the human race. "Both study the attitudes and behavior of the human race. In this sense, they are both anthropologies" (Cater & Narramore, 1979, p. 15). Christians who believe that God is the source of all truth assume that God "has revealed a vast amount of truth about the nature and functioning of the human personality," not only through

Scripture, but also through psychology (Carter & Narramore, 1979, p. 15).

Although there are significant differences among them, those who value the insights of both psychology and theology place at least some trust in the findings of psychology (e.g., Collins, 1988; Ellens, 1983; Farnsworth, 1981; Koteskey, 1980; McLemore, 1982; Narramore, 1984; Van Leeuwen, 1985). For Christians, the key to relating psychology to Christianity lies in the assumption that God not only created the world, but is actively involved in it. Thus, the study of God's creation, and particularly the study of humans, is in part the study of God. Berkhouwer (1962) wrote: "Today, more than at any time, the question, 'What is man?' is at the center of theological and philosophical concern" (p. 9).

Cater and Narramore (1979) noted:

the Christian's study of human beings may not be an option but one that is imperative. . . . Because of this, the study of the relationship of the Word of God to the findings of psychology should not be restricted to psychologists. Theologians, pastors, and Christian educators, as well as students of psychology, have much to gain from a careful study of the relationships between scriptural revelation and psychological fact and theory. (pp. 18-19)

Cater and Narramore (1979) also stated:

In some instances, the data of psychology fits well with current theological understanding. In other cases they raise questions that theology has yet to face. And sometimes they present a direct challenge to theological affirmations. But in every case, the church has a responsibility to respond to the claims of psychology by restudying, clarifying, reaffirming, enlarging, or correcting its understanding. (p. 19)

In many areas of psychology, Scripture has something to say that could influence the understanding of psychological research, theory, and practice. This is implied by the term *integration*. Psychology raises questions and may provide data that bear on the theological understanding of the human being; theology expresses divinely revealed truths that speak to psychology's developing view of humanity.

Psychologists and theologians frequently study different aspects of the same phenomena or the same phenomenon from different perspectives. Conflicts between theology and psychology may better be seen as conflicts between theory and interpretation of the facts, rather than between the facts themselves.

Several studies in the 1980s (Bryant, 1983; Joachim, 1984; Keirse & Bates, 1984; Lawrence, 1982; Mamchur, 1984; Myers & Myers, 1980; Phoon, 1986) on psychological types, temperaments, and spiritual gifts have arisen out of a growing interest in relating theology or Christianity with psychology under the hypothesis that God is present in both disciplines and that the truths of both should not conflict.

It has long been apparent that people differ in temperament, or personality characteristics. The earliest known explanation for these individual differences is the *humoral theory*, proposed by Hipocrates about 400 B.C. (Bruno, 1980, p. 377) and based on then common medical beliefs that had originated with the ancient Greeks. The body was thought

to contain four humors, or fluids. People were classified according to the predominance of one of these humors in their system.

Although later biological investigations discredited this theory, the notion that people could be divided into different personality types persisted long afterward. Theories of personality type attempt to assign people to different categories, which vary in accordance with the theory. For example, Freud's theory, which maintains that people go through several stages of psychosexual development, predicts the existence of different types of people who have problems associated with each of these stages.

Personality types are very useful in formulating hypotheses, because when a theorist is thinking about personality variables it is easy to think of extreme cases. However, most modern investigators (e.g., G. Allport; R. Cattell; H. Eysenck) reject the notion that individuals can be assigned to discrete categories; instead, they generally conceive of individual differences as quantitative, not qualitative. Rather than classify people by categories, or types, most investigators prefer to measure the degree to which an individual expresses a particular personality trait.

Several devices to measure personality types or psychological types through the notion of extroversion and introversion are: the Guilford-Zimmerman Temperament Survey (GZTS) (1949), Eysenck Personality Questionnaires (EPQ) (Eysenck & Eysenck, 1968), Sixteen Personality Factor

Questionnaire (16 PF) (Cattell, Saunders, & Stice, 1949), Comrey Personality Scales (CPS) (Comrey, 1970), Psychological Screening Inventory (PSI) (Lanyon, 1973), Classroom Behavior Inventory (CBI) (Schaefer, 1971), Minnesota Multiphasic Personality Inventory (MMPI) (Dahlstrom & Welsh, 1972; Hathaway & McKinley, 1967), Interpersonal Style Inventory (ISI) (Lorr & Youniss, 1973), California Psychological Inventory, (CPI), (Gough, 1975), and Myer-Briggs Type Indicator (MBTI) (Briggs & Myers, 1977). These objective personality tests are usually self-reporting tests that can be scored with statistical confidence. There are several studies to investigate the interrelationships between these inventories (Hundleby & Conner, 1968; LaForge, 1962; Minnick, 1969).

The concept of spiritual gifts is also at least as old as the history of the Jewish race. Even though the Old Testament does not contain comprehensive lists of spiritual gifts as does the New Testament, the doctrine of the Spirit was gradually revealed by God to Israel over her long history. Bezalel and Oholiab were "filled with the Spirit of God, . . . with knowledge and all craftsmanship" (Exod 31:3,6). The Spirit of the LORD came upon Othniel to "judge" Israel (Judg 3:10); the Spirit of the LORD came upon Samson giving him strength (Judg 14:6). Joseph's prudence is proof of the presence of the Spirit of God (Gen 41:38), and prophetic activity of whatever kind, throughout the whole of the Old Testament, is seen as the work of the Spirit (1 Sam

10:6). In general, all "gifts" are thought of as spiritual in the Old Testament.

Although there may be no systematic lists, various spiritual gifts are just as evident in the gospels as after Pentecost, not only in the person of the Messiah, but also in the life of His disciples (Matt 10:1). In the gospels, as later in the New Testament, the Spirit Himself is the greatest "spiritual gift," whether in the synoptics (Luke 11:13) or the fourth gospel (John 20:22).

But Pentecost marks a new spiritual experience, and Acts contains an account of the manifestations of numerous spiritual gifts. In addition to tongues and interpretation, Acts 3:1-10 shows the exercise of the power of healing. The gift of "discernment of spirits" was exercised by Peter (5:3). Philip exorcised demons (8:7); Peter raised the dead (9:40). In the second half of Acts, Paul raised the dead (20:9-12); cast out demons (16:18); had the power of healing (14:10); and was bitten by a snake and suffered no ill effects (28:5). Paul also showed discernment of spirit (13:9, 10).

There are three major passages elaborating spiritual gifts for ministry in the New Testament: Rom 12:1-4 (the preparation for ministry through spiritual gifts), 1 Cor 12:4-7 (the process by which an ongoing ministry through spiritual gifts is established), and Eph 4 (the purpose of spiritual gifts) (Naden, 1989).

The reason God bestowed on those first-century Christians such rich spiritual gifts can be understood through three aspects: they did not yet have the benefit of the NT canon, leadership was scarce, and traditions were also not yet established. Whereas these were immediate and temporary reasons, the more important and permanent reason was to "equip the church to minister to the needs of others both in the church through nurture, and in the community around the church through evangelism, to the glory of God and the Christian growth of each other" (Naden, 1989, p. 35-39). These twin activities are still the main reasons why God continues to bless modern Christians richly with His spiritual gifts.

Biblical scholars have identified the New Testament's named spiritual gifts and some instruments have been developed to measure these spiritual gifts (e.g., Jones, 1985; Kinghorn, 1981), but it is the New Spiritual Gifts Inventory (NSGI, Naden, 1990b) that "identifies Christians' clusters of probable giftedness rather than specific narrowly-defined gifts" (Naden, 1989, p. xii). This empirically developed instrument allows "individuals to experiment with a variety of approaches within a cluster in order to establish with certainty the specific ministry or ministries for which the Lord has already equipped them" (Naden, 1989, p. xii).

Statement of the Problem

Some correlational studies have been conducted between psychology types and religious issues (Carskadon, 1981; Harbaugh, 1984) and between personality factors and educational issues (Ayers & Bashaw, 1969; Goldschmid, 1967; Long, 1970; Trent, 1968; Turner, 1968).

Joachim's study (1984) especially focused on the relationship of spiritual gifts with temperament types, and Phoon (1986) studied the correlation of Jungian psychological types and spiritual gifts. These studies found that there are significant correlations between psychological types and spiritual gifts, and between temperaments and spiritual gifts. However, far fewer correlations than anticipated were identified and it was hypothesized that the instruments utilized in these studies may not have been adequate for the research questions.

This present study proposed to examine the nature of the relationship between personality factors and five spiritual gifts clusters.

A preliminary study (Naden, Swanson, & Thayer, 1992) examined the possible correlation between the personality factors of the 16 PF and spiritual gifts clusters of the NSGI and hypothesized five predictive models. The strength of the correlations suggested that a full-scale study was warranted.

In this study, the personality factors of the Sixteen Personality Factor Questionnaire (16 PF), one of the most widely used and accepted instruments for the global

assessment of normal personality, is correlated with five clusters of spiritual gifts identified by the New Spiritual Gifts Inventory (NSGI).

Purpose of the Study

The purpose of this study was to explore hypothetical predictive models regarding the correlation that exists between the personality factors and five spiritual gifts clusters on the basis of two empirically developed instruments, the Sixteen Personality Factor Questionnaire and the New Spiritual Gift Inventory, in two contrasting cultures. Specifically, this study examined the following research questions:

1. Can pastors hypothesize ministries for members on the basis of personality factors when members have had no opportunity to demonstrate giftedness in a specific ministry?
2. What is the nature of the relationship between spiritual gifts clusters and personality factors among seminary students and their spouses at Andrews University in Berrien Springs, Michigan?
3. What is the nature of the relationship between spiritual gifts clusters and personality factors among Filipino undergraduate students at Philippine Union College?
4. Are there differences and/or similarities between Filipino undergraduate and seminary students in the United States with respect to the relationship(s) between spiritual gifts clusters and personality factors?

Hypotheses

The following research hypotheses were formulated in relation to the above research questions:

Hypothesis 1

Among the seminarian respondents, there is a significant multiple correlation between each of the spiritual gift clusters and personality factors indicated by the 16 PF.

Hypothesis 2

Among the Filipino respondents, there is a significant multiple correlation between each of the spiritual gift clusters and personality factors indicated by the 16 PF.

Theoretical Framework

According to Paul, the gift of the Spirit is given to each individual in the body of Christ (1 Cor 12:7,11). But no single gift is given to everyone (1 Cor 12:29,30). Although every Christian has at least one spiritual gift (1 Cor 12:7; McRae, 1976, p. 31), God has not limited His blessings only to Christians. Based on the original bestowment in Eden, God has given some gifts to all humanity in the form of genetically transmitted natural talents.

The distinction between natural talents that are innate in humanity from birth and spiritual gifts that are bestowed when one is born again is not directly addressed in

Paul's writings. But many biblical scholars believe that spiritual gifts are much more than natural or genetically transferred talents (Bittlinger, 1967; Gangel, 1983; Gee, 1972a; Neighbor, 1974). They argue that natural talents contribute to human society, but do not constitute a spiritual ministry. In contrast, spiritual gifts are manifested and utilized for the glory of God. On the other hand, others contend that natural talents are not lost at the time of conversion, but rather, from the moment of new birth, through the enriching power of the Holy Spirit, natural abilities become spiritual gifts and are thereafter used not to glorify self, but to glorify God (Barnette, 1965; Griffiths, 1978; Naden, 1989; Schweizer, 1961; Stott, 1964; Wolvoord, 1975).

Those who view the conversion experience as the act of giving one's naturally inherited talents and environmentally influenced personality to God, and then receiving them back as spiritual gifts, are comfortable with the idea that God's original gift of life and talents "at birth" are honored in the "new birth" with a perfect match of personality and service to Him (Barnette, 1965; Griffiths, 1978; Naden, 1989; Schweizer, 1961; Stott, 1964; Walvoord, 1975). This is the basis to hypothesize that giftedness (i.e., avenues of Christian Service) may be identified through an analysis of personality factors alone without the utilization of a giftedness inventory on the assumption that God honors who the individual is intrinsically, as seen

through his personality, when He "gifts" or commissions him/her for acts of service for Him.

16 Personality Factors

The 16 PF is one of the most useful personality tests currently available. The 16 PF is a questionnaire designed to measure normal dimensions of personality. The test provides 16 basic scores for adults.

The 16 PF has accumulated valuable social validation data in the form of profiles for about 30 occupations (Cattell, Day, & Meeland, 1956). Some studies on the relationship between 16 PF and ministry are available (Banks, 1966; Chalmers, 1969; Childers & White, 1966). Chalmers (1969) utilized the 16 PF to determine whether there were systematic differences among personality traits which correlate with measures of performance among Seventh-day Adventist clergymen, and concluded that "there were significant differences in eleven out of sixteen trait means between the ministers and the general adult population" (p. 27). Banks (1966) utilized the 16 PF to investigate selected social and psychological variables relevant to satisfaction with the role of minister among the Seventh-day Adventist seminary students and concluded that three personality factors (H, N, and Q₄) were significantly related to role satisfaction.

Spiritual Gifts and Personality Factors

No Christian action is independent of the Holy Spirit. Christians have the potential to change the world through the Holy Spirit. And the power within Christians is, in part, the effectiveness of their spiritual gifts.

Naden developed several cluster categories by drawing together gifts that appear to be inter-related. The classifications were originally suggested by the factor analysis that produced the original Spiritual Gifts Inventory (SGI) with 19 gifts.

Naden's clusters are: (1) teacher, (2) shepherd/evangelist, (3) supporter, (4) counselor, and (5) leader.

Under the theory that natural abilities and personality are closely related with spiritual gifts, it has been hypothesized that certain personality factors of the 16 PF, already shown to be predictors of vocation, might also be indicative of similar spiritual ministries. This theory is based on the North American setting and the same hypothesized model is projected for North American and Filipino cultures.

There were numerous studies on profiles by the 16 PF, but none of them were useful in building hypothetical models for the five spiritual gifts clusters. A complete ERIC search from 1966 to 1992 brought 53 entries using the description "16 PF" and 54 entries using the description "personality profile." However, no study gave result that could be used to hypothesize personality factors predicting spiritual gifts clusters. Thus, the theory to build

hypothesized models for each spiritual gifts cluster is based first, on the Handbook for the 16 PF (Cattell, Eber, & Tatsuoka, 1970) which contained comprehensive vocational profiles; second, on the Naden, Swanson, and Thayer preliminary findings; third, on knowledge rooted in a Christian perspective; and fourth, findings of other studies.

Teacher Cluster

The Handbook for the 16 PF (Cattell, Eber, & Tatsuoka, 1970) suggested a prediction model for teaching effectiveness including factors A+, B+, C+, M+, and N+ (p. 168). In considering a theoretical model for Christian teachers, one would expect them to be warmhearted (A+), friendly, responsive (A+, H+), imaginative (M+), polished (N+), and self-controlled (Q₃+).

Factor A (warmth) "is a significant contributor to success in teaching" (Krug, 1981, p. 5). High M (imaginative) has been found to be most significant for the more creative teachers (Cattell et al., 1970, p. 99), which would be helpful in preparing different Bible classes for all age groups. Particular high H and M for Christian teachers were found by the Naden, Swanson, and Thayer study (1992). Birkin (1969) found that creativity in students may be fostered by a teacher with high M and N factors. The Handbook for the 16 PF (Cattell et al., 1970) reported that studies on high-school teachers and university professors revealed M factors and N factors were high for those teaching

professions (p. 183). Naden et al. (1992) also found high H for Christian teachers. It is noteworthy that high H (boldness) is the most significant factor for successful male teachers (Cattell et al, 1970, p. 159). Thus, the hypothesized model for the teacher cluster includes factors A+, H+, M+, N+, and Q₃+

Shepherd/Evangelist Cluster

The Handbook for the 16 PF reported prediction models for Roman Catholic priests, nuns (missionary), and Roman Catholic seminarians and included factors A+, B+, I+, and F- (p. 212). Naden et al. (1992) found factors H, B-, Q₁-, Q₃+, and G+ for the shepherd/evangelist cluster.

The shepherd/evangelist is a caring and sharing person who visits and encourages church members and unbelievers. This person would need A+ (warmhearted); and evangelism and pioneering demand H+ (venturesome), and Q₃+ (self-discipline). A+ (warm) was one of the factors for effectiveness in ministerial candidates (Stewart, 1990). Wallstrom (1990) found that H+ was an important factor for role satisfaction in ministry. The high H factor means bold, venturesome, likes meeting people, active, and responsive, which are well-suited personality traits to the shepherd/evangelist function which includes "moving to an area where there is no Christian church and pursuing one's vocation with a view to finding opportunities to share the gospel" (Naden, 1989, p. 101).

It is ideal for those with very high H to be moderated with Q₃+. The Q₃+ person typically has strong self-control, persistence, consideration of others, and is respectful of social expectations. Q₃+ was one of the most important factors for the prediction of missionary success overseas (Britt, 1981).

The shepherding function includes feeding, tending, nurturing, and being a good example to the flock (1 Pet 5:1-3), and F- (seriousness, concerning) and G+ (conscientious, persevering) may be indicative for these functions. A higher G factor score describes a conscientious, persevering, emotionally disciplined person who is concerned about moral standards and rules. Along with low Q₁ factor's conservatism and traditionalism, it is difficult for such a person to yield to liberal or radical ideas. These are valued qualities for the shepherds in the evangelical parochial context.

Thus, the hypothesized model includes factors A+, H+, Q₃+, F-, G+, and Q₁-.

Supporter Cluster

Factors Q₁-, B-, and Q₃+ are common in the prediction models for kitchen helpers and janitors (Cattell et al., pp. 197, 201). It is obvious that no one or two vocations could encompass all the richness of supporting spiritual ministries. However, in order to hypothesize within

available theory and research, these two vocations seemed to be the closest available.

Naden et al. (1992) found factors Q₄-, H+, G+, O+, Q₃+, and B- for the supporter cluster.

When Q₄ factor is low, the person is typically very relaxed, composed, and rarely frustrated. Observation often suggests that people who become involved in supporting ministries in the church are people with these qualities. Activities such as collecting food for the needy, fixing a meal for a patient, chopping wood for an elderly person, assisting the handicapped, and visiting those in hospital and prison are common supporting cluster ministries.

Other activities such as putting up seminar posters, caring for church grounds, opening the church for services, and serving in the kitchen need high G factor's qualities such as being persistent, responsible, disciplined, ordered, and having a strong sense of duty.

Someone with low B factor is "able to work better with simple things than with complex ideas," handle routine work (Chalmers & Chalmers, 1979, p. 38), and tends to work with his/her hands. A person with high O factor generally shows concern for details and a strong sense of obligation--also indicative traits for Christian supporters.

The O+ factor and the Q₄- factor are essentially opposite, because O+ indicates apprehensive, worrying, and Q₄- indicates relaxed and unfrustrated. However, O+ does not indicate "the individual's being irrationally worried, tense,

irritable, anxious, and turmoil," as Q₄+ describes it (Cattell et al., 1970, p. 108). Some of the characteristics of the high O factor are a strong sense of obligation and sensitivity to people's approval and disapproval, which would probably match a supporter's characteristics. Hospitality, giving, and intercessory gifts of the supporter cluster need low Q₄ factor's relaxed, unfrustrated, composed attitudes, and these traits suggest a healthy balance to the anxieties of high O factor.

According to the Handbook for the 16 PF, high H and Q₃ are associated with success in organized activities (Cattell et al., 1970, pp. 92, 107), which is related to the supporting function in the church. Thus, the hypothesized model includes factors Q₄-, G+, O+, H+, Q₃+, and B-.

Counselor Cluster

The Handbook for the 16 PF reported a prediction model for employment counselors that includes factors B+, I+, F-, A+, and M+ (Cattell et al., 1970, p. 198).

In considering a theoretical model for Christian counselors, the same five factors may be included. Christian counselors often find themselves intervening in a crisis in the church as well as assisting those with private struggles. Heightened sensitivity (I+), seriousness of approach (F-), and emotional stability (C+) would be advantages for such counselors along with low Q₄ factor's relaxed, unfrustrated, and composed drive.

Moreover, A+ (warmhearted) would be helpful for comforting, encouraging, and motivating skills. Naden et al. (1992) found M+ for Christian counselors and stated "the ability to use imaginative (M+) approaches to the problems faced by people would be beneficial to the counselor" (p. 6). The hypothesized model includes factors B+, I+, F-, M+, A+, C+, and Q₄-.

Leader Cluster

The profile pattern for the highest leadership scale (Krug, 1981, p. 91) shows that factors N+, Q₃+, C+, H+, G+, and O- are indicative of a leader. Naden et al. (1992) found factors H+, E+, G+, O-, and Q₃+ for the leader cluster.

Christian leaders sometimes must make tough decisions. A high H factor means bold, active, adventurous. Often these are characteristics of leaders. The H+ person's boldness and sociability result in showing significantly greater frequency of becoming adopted as leaders (Cattell & Stice, 1954). One of the gifts in the leader cluster is the gift of administration, and H factor is high in administrators (Cattell et al., 1970, p. 92). Christian leadership which involves activities taking the initiative in new outreach programs sometimes demands boldness and ascendance--high E with high H. The Handbook for the 16 PF states that factor E "is somewhat higher in established leaders than in followers," and "groups averaging high on E

show more effective role interaction and democratic procedure" (Cattell et al., 1970, p. 86).

A person with Q₃+ brings his/her emotions and general behavior under control and Christian leaders' self-control "is essential for the development of a consistent, predictable character approved by society and God" (Chalmers & Chalmers, 1979, p. 57).

A high G score also was evaluated as significantly related to leadership by the Handbook (p. 90). Christian leaders also need to be conscientious, persevering, and emotionally disciplined people who are concerned about moral standards and rules (G+). When a leader is conscientious (G+), the O- traits such as inner peace, confidence, and self-assuredness are justified. On the other hand, if one is expedient (G-) and the factor O is low, one would have very little concern when God's rules are disregarded. Thus, it is important for a Christian leader to have moderately high G and moderately low O traits together.

Serenity, an inner peace, and confidence are important in leaders and the leader cluster is correlated with a low O factor which indicates these traits. It is noteworthy that "high O factor is strongly weighted against successful leadership" (Cattell et al., 1970, p. 102).

Thus, the hypothesized model for the leader cluster includes factors H+, E+, G+, Q₃+, and O-.

Significance of the Study

The aim of this study was to help Christians make better judgments about their giftedness for potential ministry. An individual's past experience is an indicator of giftedness. The New Spiritual Gifts Inventory taps the evidence of an individual's giftedness through the experience of what has happened in their individual lives. But significant correlation between an individual's personality and giftedness would indicate potentiality for future ministry irrespective of the opportunity during past ministry. If one can identify the specific aspects of individual personality that are correlated with a specific cluster of spiritual gifts, one can establish a personality profile for each of the spiritual gifts clusters. Then it would be possible to explore potential giftedness by exploring personality.

Delimitation of the Study

The population was delimited to selected seminary students at Andrews University (1989-1992) and undergraduate students at Philippine Union College enrolled during the 1992 school year. The sample from among the seminary students is skewed towards the male. The examination of the relationship between spiritual gifts clusters and personality factors was done without regard to gender. There is no separate analysis for sex (male, female).

This study was further delimited to the following variables:

1. Sixteen personality factors as indicated by the 16 Personality Factor Questionnaire--A, B, C, E, F, G, H, I, L, M, N, O, Q₁, Q₂, Q₃, Q₄.
2. Five clusters of spiritual gifts indicated in the New Spiritual Gifts Inventory--teacher, shepherd/evangelist, supporter, counselor, and leader.

Definition of Terms

Counselor cluster comprises three gifts named in the New Testament: insight, encouragement, and wisdom. The three gifts go together because they are similar and overlap each other (Naden, 1989, p. 74).

Factor analysis is a complex statistical technique based on the concept of correlation which Cattell used to discover and investigate personality traits (Hergenhahn, 1980, p. 190).

Factor loading is the weight given to a factor based on its importance to a given situation (Hergenhahn, 1980, p. 190).

Leader cluster comprises three gifts: administration, leadership, and faith (Naden, 1989).

Personality is the active organization of one's traits and habits into characteristic ways of responding to situations and to other people.

Personality factor A is a bipolar description of personality on the basis of factor analysis. A low score in factor A indicates that the individual is reserved, detached, critical, aloof and/or stiff; a high score indicates that he/she is warmhearted, outgoing, easygoing, and/or participating.

Personality factor B is a bipolar description of personality on the basis of factor analysis. A low score in factor B indicates that the individual is concrete-thinking and/or less intelligent; a high score indicates he/she is abstract-thinking and/or more intelligent.

Personality factor C is a bipolar description of personality on the basis of factor analysis. A low score in factor C indicates that the individual is affected by feelings, is emotionally less stable, and/or easily annoyed; a high score indicates he/she is emotionally stable, mature, and/or calm.

Personality factor E is a bipolar description of personality on the basis of factor analysis. A low score in factor E indicates that the individual is submissive, humble, mild, and/or accommodating; a high score indicates he/she is dominant, assertive, aggressive, stubborn, and/or bossy.

Personality factor F is a bipolar description of personality on the basis of factor analysis. A low score in factor F indicates that the individual is sober, restrained, prudent, and/or serious; a high score indicates he/she is

enthusiastic, spontaneous, heedless, expressive, and/or cheerful.

Personality factor G is a bipolar description of personality on the basis of factor analysis. A low score in factor G indicates that the individual is expedient and/or self-indulgent; a high score indicates he/she is conscientious, conforming, moralistic, and/or staid.

Personality factor H is a bipolar description of personality on the basis of factor analysis. A low score in factor H indicates that the individual is shy, threat-sensitive, hesitant, and/or intimidated; a high score indicates he/she is bold, uninhibited, and/or can take stress.

Personality factor I is a bipolar description of personality on the basis of factor analysis. A low score in factor I indicates that the individual is tough-minded, self-reliant, no-nonsense, and/or realistic; a high score indicates he/she is tender-minded, overprotected, intuitive, and/or refined.

Personality factor L is a bipolar description of personality on the basis of factor analysis. A low score in factor L indicates that the individual is trusting and/or accepting of conditions; a high score indicates he/she is suspicious, distrustful, and/or skeptical.

Personality factor M is a bipolar description of personality on the basis of factor analysis. A low score in factor M indicates that the individual is practical and/or

has "down-to-earth" concerns; a high score indicates that he/she is imaginative, absent-minded, and/or impractical.

Personality factor N is a bipolar description of personality on the basis of factor analysis. A low score in factor N indicates that the individual is forthright, unpretentious, and/or open; a high score indicates that he/she is shrewd, polished, and/or calculating.

Personality factor O is a bipolar description of personality on the basis of factor analysis. A low score in factor O indicates that the individual is self-assured, placid, secure, and/or untroubled; a high score indicates that he/she is apprehensive, self-blaming, insecure, and/or worrying.

Personality factor Q₁ is a bipolar description of personality on the basis of factor analysis. A low score in factor Q₁ indicates that the individual is conservative and/or respecting traditional ideas; a high score indicates that he/she is experimenting, liberal, critical, and/or free-thinking.

Personality factor Q₂ is a bipolar description of personality on the basis of factor analysis. A low score in factor Q₂ indicates that the individual is group-oriented, and/or sound follower; a high score indicates that he/she is self-sufficient, resourceful, and/or prefers own decisions.

Personality factor Q₃ is a bipolar description of personality on the basis of factor analysis. A low score in

factor Q₃ indicates that the individual is uncontrolled, lax, and/or careless of social rules; a high score indicates that he/she is following self-image, socially precise, and/or compulsive.

Personality factor Q₄ is a bipolar description of personality on the basis of factor analysis. A low score in factor Q indicates that the individual is relaxed, tranquil, composed, and/or unfrustrated; a high score indicates that he/she is tense, frustrated, overwrought, and/or fretful.

Shepherd/Evangelist cluster includes gift of evangelism, gift of shepherding, gift of speaking up for God, gift of cross-cultural ministry, and gift of pioneering.

Source traits constitute a person's personality structure and are thus the ultimate causes of behavior. Source traits are causally related to surface traits (Hergenhahn, 1980, p. 191).

Spiritual gift is a specific ability given to Christians by the Holy Spirit so he/she can serve others by nurturing and/or outreach.

Supporter cluster consists of five gifts: hospitality, support, giving, compassion, and intercession.

Surface traits are the outward manifestations of source traits. These are the characteristics of a person that can be observed and measured (Hergenhahn, 1980, p. 190).

Teacher cluster deals with the gift of knowledge and the gift of teaching.

Traits can be equated with the term factor for Cattell. Both refer to an underlying ability or characteristic responsible for consistency in behavior (Hergenhahn, 1980, p. 190).

Outline of the Study

This study has five chapters. Chapter 1 is comprised of the introduction, statement of the problem, purpose of the study, hypotheses, theoretical framework, significance of the study, delimitations of the study, definition of terms, and outline of the study.

Chapter 2 is the review of literature. It is divided into two main sections: spiritual gifts and personality factors.

Chapter 3 discusses the methodology, the population, the procedures followed in the collection of data, instrumentation (16 PF and NSGI), the null hypotheses, and the statistical analyses.

Chapter 4 presents the analyses of the data, and chapter 5 presents the summaries, implications, and recommendations.

Appendices and a bibliography constitute the balance of this research.

CHAPTER II

REVIEW OF LITERATURE

Spiritual Gifts

Numerous scholars, from charismatic to conservative perspectives, have written on the biblical theme of spiritual gifts. Largely because of the charismatic movement, the question of spiritual gifts recently has come to the forefront in the life of the Christian church. According to Wagner (1979), who used the term "gift theology" to describe his philosophy of gifts, approximately 80% of the books on the subject have been written since 1970.

Many people from the charismatic movement act as though the Spirit's gifts consisted primarily of tongues-speaking (and perhaps, miracles and healing), as some Corinthian believers seem to have believed. As a result, articles and books on the gift of tongues are numerous. Some scholars (Baxter, 1983; Lindsell, 1972; MacArthur, 1979; Walvoord, 1975) have expressed the concern that much of what is being written on this theme has a "feeling" orientation instead of being Bible-based, continuing what, for centuries, has been an operational gap between the biblical teaching about spiritual gifts and their use in the Christian community. Walvoord (1975) stated:

The final test must always be what the Scriptures actually teach. Experience may serve as a partial test of the conclusions, but, in itself, the Bible must be taken as the final authority. Experience ever possesses two fatal grounds for error: (1) a misapprehension of the experience itself and its content and divine origin, (2) a faulty conclusion as to the doctrinal meaning of the experience. (p. 174)

Baxter (1983) opposed Wagner's gift theology notion because of his "open-ended approach" to the discussion of spiritual gifts. Baxter's argument against Wagner is that his "emphasis is no longer on the Word of God, but on the individual" (p. 18). Baxter's conclusion is well taken: "What we believe and teach about the gifts of the Holy Spirit must not take away from nor add to the teaching of the Word of God" (p. 21).

The Term "Spiritual Gifts"

In the Greek New Testament, several words may be translated 'gifts.' Among them, two Greek words are prominent: charisma (manifestation of grace) and pneumatikos (manifestation of the Spirit). Andrews (1982) distinguished them as follows:

Charisma speaks of their being unearned and undeserved, the result of a gracious act of God. Those possessing the gifts are said by Peter to be 'stewards of the manifold grace of God' (1 Peter 4:10). Pneumatikos emphasizes that they were spiritual as opposed to natural abilities. (p. 169)

The Greek word charisma means "gift of grace."

Thayer (1979) stated:

In the technical Pauline sense charisma . . . denotes extraordinary powers, distinguishing certain Christians and enabling them to serve the church of

Christ, the reception of which is due to the power of divine grace operating in their souls by the Holy Spirit. (pp. 345-46)

Vine (1985) contended that pneumatikos "always connotes the idea of invisibility and of power. It does not occur in the Septuagint nor in the Gospels; it is in fact an after-Pentecost word" (p. 594). Thus, this word indicates that the gifts are not of man, neither by man, but of God. Some scholars have called them of "sovereign distribution" (Andrews, 1982; Baxter, 1983; Criswell, 1967; Gangel, 1983; Griffiths, 1979; Kinghorn, 1976; Strauss, 1976).

Vine also referred to charisma as always being used in connection with "grace (charis) on the part of God as the Donor" (p. 264). Charis, generally translated as 'grace' in the New Testament, could be used for all blessings that comes from God as 'free gifts.' More importantly, charis is "a word of broader application and fundamental to an understanding of St. Paul. This word . . . means, for Paul, the wholly unmerited favor of God, actualized in the cross of Jesus" (Goetchius & Price, 1984, p. 29). Schatzmann (1987) characterized Paul's theology as "charistocentric" (p. 2)

Dunn (1975) echoed the same idea,

In Paul charis is a central concept that most clearly expresses his understanding of the salvation event, that is, as an act of wholly unmerited generosity on God's part. . . . For Paul grace (charis) means power, an otherly power at work in and through the believer's life, the experience of God's Spirit, . . . the dynamic experience of being taken hold of, upheld and used by God. (pp. 202-204)

Dunn concluded that "grace gives the believer's life both its source, its power and direction. All is of grace and grace is all" (p. 205).

The term charisma is uniquely of Pauline usage (Brown, 1976, p. 118), which was noted by Dunn (1975) as "the main influence determining Paul's choice of the word is his own experience, the creative experiences which it describes" (p. 206). Even in the New Testament, charisma is a relatively rare word, occurring only 17 times. Apart from 1 Pet 4:10, it is only used in the Pauline literature, where it is used in a variety of related ways. In Rom 5:15, 16; 6:23, charisma refers to the gracious gift of righteousness or salvation given through Jesus Christ, which overlaps the meaning of charis. Charisma is used twice to refer to particular gifts of divine favor given to the believer (2 Cor 1:11; 12:9). In 1 Cor 7:7, celibacy is regarded as charisma. Paul's most frequent usage of charisma is as a particular manifestation of grace within the context of the community of faith (Rom 11:29; 9:4). The primary passages, Rom 12:6-8 and 1 Cor 12-14, designate particular gifts as a result of God's grace for the upholding of the body of Christ. In various passages, the word charisma is used of gifts of the Spirit in the sense of special capacities or powers in the Christian community, and only in this context does Paul go into detail and give instances of the sort of charismata he has in mind (Rom 1:11; 12:6; 1 Cor 1:7; 7:7; 12:4, 9, 28, 30, 31; 1 Tim 4:14; 2 Tim 1:16).

Pneumatikos is almost as distinctively Pauline as charisma, at least within early Christian literature (Dunn, 1975, p. 207). It expresses "clearly the sense of belonging to Spirit, embodying Spirit, manifesting Spirit, of the essence or nature of Spirit" (Dunn, 1975, p. 208). Paul uses it in three ways: (1) as an adjective (spiritual "something," Rom 1:11; 7:14; 1 Cor 15:44, 46; Eph 1:3; Col 3:16), (2) as a masculine noun (spiritual man, pneumatiker, 1 Cor 2:13, 15; 14:37; Gal 6:1), and (3) as a neuter plural noun (the spirituals, spiritual things, 1 Cor 9:11; 12:1; 14:1).

In only one instance, Rom 1:11, are the two words pneumatikon and charisma used together. Paul desires to go to Rome "that I may impart some 'grace gift of spiritual manifestation.'" Dunn noted that Paul prefers charismata over pneumatikos (e.g., Rom 12:6; 1 Cor 1:7) since the latter seems to be "used with more restricted reference to spiritual gifts, synonymous with the charismata" (Dunn, 1975, p. 208). Ellis (1974) argued that the term is not equivalent to the more general charismata, although it may be identified with the 'greater charisms' (Rom 1:11; 1 Cor 14:1; 12:31). Sullivan (1982) noted that the reason why Paul uses pneumatika instead of charisma at the beginning of chaps. 12 and 14 of 1 Corinthians is that he "is criticizing here the Corinthians' tendency to see the Spirit's working primarily, if not exclusively, in such 'gifts of inspiration' as tongues and prophecy" (p. 23).

The third word Paul uses in 1 Cor 12 to describe spiritual gifts is diakonia (vs. 5). The word, translated "service," is used in the New Testament to describe the office and work of a 'deacon' or any kind of service or ministry in the church. It is a further reminder of the truth that gifts are to be exercised for the well-being of others and not for the bolstering or encouragement of one's self.

Next, Paul uses the word energema, translated "working" (1 Cor 12:6), to describe spiritual gifts. This Greek word is used in the New Testament only here and in vs. 10. It is derived from the verb energeo which, in its passive form, means to be actuated or set in operation, and in the New Testament is "always used of some principle or power at work" (Meyer, 1883).

The final word Paul employs to describe the nature of gifts is phanerosis (vs. 7). To each Christian, he says, is given the "manifestation" of the Spirit for the common good. Like energema this word is used only once elsewhere in the New Testament (2 Cor 4:2), where Paul uses it to describe the 'open statement' of the truth involved in the preaching of the gospel. The word is derived from the verb phaneroein which means to make visible or clear or known. Gifts are "manifestations of the Spirit"; hence, when they are exercised, God's nature or His way of dealing with men and women is made clear where before there was ignorance or confusion.

The word used in Eph 4:8 of the "gifts" is domata, which occurs five times in the New Testament. This word is made up of the stem "to give" do-, as several other Greek nouns that can be translated "gift" (doma, dosis, dorea, dorema, doron), with the ending -ma to mean "the result of giving" a gift, and with a further addition of -ta indicating a plural number of the results of giving (i.e., "gifts").

In summary, Jones suggested that the various terms Paul uses to describe spiritual gifts show that the way Christians use their gifts is different and Paul's usage of those words reflects the experience he had with spiritual gifts in his own life (1985, p. 27-28), yet these words are not used to express different experiences, but rather different aspects of the same experience.

The Nature and Purpose of Spiritual Gifts

In his first letter to the Corinthians, Paul emphasizes the need for understanding God's gifts to his people. He says: "Now about spiritual gifts, brothers, I do not want you to be ignorant" (1 Cor 12:1, NIV). Paul's prescription for the Corinthian misconception of spiritual gifts is a proper understanding of the nature and purpose of charisms (Hummel, 1978, p. 174). Paul uses three different Greek words in 1 Cor 12:4-6 (charismata, diakoniai, and energemata) to describe the gifts of the spirit to teach something about the nature and purpose of spiritual gifts. Bittlinger (1967) states: "In his use of these three terms

Paul is expressing something about: the origin of the gifts; the way in which they are experienced in the church; the purpose of the gifts" (p. 20).

The term charismata denotes the source of the gifts as divine charis, and the term diakonai means 'eager readiness to serve', which implies that their purpose is to serve others, not the recipient. The term energēmata means functional 'outworkings,' to produce results. Ervin (1968) explained: "These three, gifts, ministrations, and workings, are all designated collectively as *manifestations* of the Spirit" (p. 111), as vs. 7 reads.

These three words do not refer to different entities but define each other so that the latter two serve to identify the nature of the former, and to make plain that the gifts listed in the following verses (8-10) are to function for service within the church. The diverse, multifaceted manifestation of the Spirit is "for the common good" (vs. 7), and the consideration that identifies the purpose of all gifts and regulates their exercise is the edification of the church (1 Cor 14:12; cf. vs. 26: "all things . . . for edification").

Definition of "Spiritual Gifts"

While giving many insights into the nature and function of spiritual gifts, the Bible does not give a formal definition of them. Kinghorn (1981) defined charisma in three ways: "Gift of salvation" (Rom 6:23), "Blessing, encouragement, or comfort" (2 Cor 1:11), and "a special

ability to minister with effectiveness and power" (Rom 12:6; 1 Cor 12:4,31; 1 Tim 4:14; 1 Pet 4:10). It is in the context of the third definition that charisma means spiritual gifts.

Koenig's (1978) definition of spiritual gifts (charismata) is as follows: "The apostle Paul especially uses it (charismata) to describe gifts of God (not always spectacular) that differentiate believing individuals from one another for the purpose of enhancing their mutual service" (p. 14).

Dunn's (1975) definition stated: "Charisma can only be understood as a particular expression of charis, as the gracious activity of God through a man . . . for others; charisma is the experience of grace given" (pp. 253-58); Thayer's (1979) definition is as good as any: "extraordinary powers, distinguishing certain Christians and enabling them to serve the church of Christ, the reception of which is due to the power of divine grace operating in their souls by the Holy Spirit" (p. 667).

Stott (1964) combined the three words of 1 Cor 12:4-6 and defined spiritual gifts as:

certain capacities, bestowed by God's grace and power, which fit people for specific and corresponding service [It] is neither a capacity by itself, nor a ministry or office by itself, but rather a capacity which qualifies a person for a ministry. (p. 87)

Naden (1989) emphasized that "gifts are for ministry to others" and defined spiritual gifts as "special abilities given to Christians by the Holy Spirit so they can serve others in nurture and/or outreach" (p. 43).

Natural Talents and Spiritual Gifts

In the New Testament, Paul never gives a clear picture of the relationship between natural talents and spiritual gifts. Scholars have suggested different understandings of the distinction between natural talents and spiritual gifts. Generally, two positions sum up the discussion.

Some have written that spiritual gifts are supernatural, whereas talents are innate in every human at birth (Baxter, 1983; Ervin, 1968; Flynn, 1974; Gangel, 1983; Gee, 1972a; McRae, 1976; Neighbour, 1974; Owen, 1971; Pentecost, 1970; Stedman, 1972; Walvoord, 1975; Williams, 1990). Gangel stated that "spiritual gifts work in the spiritual realm and natural talents in the natural realm" (p. 11). Criswell (1966) referred to the word charisma as the special gifts given to man by God, and said:

We must remember the word does not refer to a natural talent. It refers to a grace gift, an undeserved favor from God to man. It refers to something bestowed that is neither purchased nor gifted, of high intelligence, possessing natural endowments. These are not ta charismata. The charismata are supernatural endowments. (p. 149)

These writers believed that spiritual gifts can be "bestowed" (manifested) suddenly at any point in the believer's experience (Gee, 1972a)

However, Flynn (1974), Goetchius and Price (1984), Orjala (1978), Neighbour (1974), Purkiser (1975), and Stott (1964) suggested that talents and gifts are related. That

means there is a possibility to "christianize" natural talents, making them into spiritual gifts (Bittlinger, 1967; Ervin, 1968; Griffiths, 1978; Kinghorn, 1976; Laurentin, 1978; Stedman, 1972).

The second position on the relationship between talents and gifts has contended that spiritual gifts and natural talents are not essentially different, for the Lord will give His children natural aptitudes that would subsequently become enriched as spiritual gifts at the time of conversion (Barnette, 1965; Griffiths, 1978; Naden, 1989; Schweizer, 1961; Stott, 1964; Walvoord, 1975). Stott (1964) made a strong point that the Lord is both God of Creation and Redemption. The God who chose humans before the foundation of the world (Eph 1:4,5) and who prepared beforehand good works for them to walk in (Eph 2:10) is also the God of Redemption who pours His grace upon and endows humanity with spiritual gifts (Eph 4:7,11) (pp. 90-94). Fife (1978) warned of the mistake "to assume that when the Holy Spirit is ministering through the spiritual gifts of a person, his personality is somehow by-passed . . . God does not obliterate personality. He refines it and uses it" (pp. 113-114). Jones (1985) stated that "our giftedness as much determines our personalities as our personalities determine our giftedness" (p. 68).

Classifying Spiritual Gifts

Even though Paul never provides a systematic classification, among Bible scholars there have been various

means of classifying spiritual gifts, "but none has found general acceptance" (Goetchius & Price, 1984, p. 30).

One of the common classifications of these gifts is to distinguish them as permanent and temporary (e.g., Pentecost, 1970; Strauss, 1976). Thomas (1978) compared the permanence of love (1 Cor 13:8a) with temporary gifts (i.e., prophecies, tongues, and knowledge) (1 Cor 13:8b). Baxter (1983) divided "gifts which were permanently needed in the church" from "gifts which were temporary in nature" (p. 83) and labeled them as "fulfilling" and "fulfilled" gifts. Criswell (1966) introduced another categorization of gifts as either continuing or transitory, and distinguished the permanent gifts as for the building up of the body (for the edification of the church), and the temporary gifts as signs to substantiate or corroborate the message (for unbelievers to authenticate the message). Walvoord (1975) considered most of the gifts of 1 Cor 12:8-10 as temporary (i.e., belonging only to the apostolic age). Williams (1990) strongly opposed that position, saying, "such juggling with Scripture has even less to commend it than a forthright dismissal of all the spiritual gifts" (p. 327).

Orjala (1978) used the lists of three Bible references of spiritual gifts to classify them as: (1) the primary gifts (Rom 12:6-8), (2) secondary gifts (1 Cor 12:8-10), and (3) ministries which involve gifts for their functioning (Eph 4:11).

It was Criswell (1966) who illustrated typical ways of grouping the gifts out of many individual approaches (pp. 154-156). He chose seven groupings and listed them as:

- I. (1) Gifts for the ministering of the Gospel (1 Cor 12:8-10)
 (2) Gifts for the work of the church (1 Cor 12:28-30)
 (3) Gifts for the ministries of the church (Rom 12:6-8)
 (4) Gifts for the building up of the church (Eph 4:11)
- II. (1) Emotional gifts (1 Cor 13:1)
 (2) Intellectual gifts (1 Cor 13:2a)
 (3) Practical gifts (1 Cor 13:2b)
 (4) Philanthropic, sacrificial gifts (1 Cor 13:3)
- III. (1) Gifts connected with the ministry of the Word
 (2) Gifts connected with practical uses
- IV. (1) Gifts of revelation
 (2) Gifts of power
 (3) Gifts of inspiration
- V. (1) Basic ministries, gifts of edification
 (2) Sign gifts for authentication
- VI. (1) Natural gifts
 (2) Supernatural gifts
- VII. (1) Eleven permanent gifts
 (2) Five temporary gifts

Naden's development of six spiritual gifts clusters was based on three reasons. Naden (1990a) suggested that "some gifts named in the New Testament appear to be intimately related" (p. 4) and explained the formation of gift clusters through the statistical method of factor analysis in these words:

It was hypothesized that there may be such a degree of commonality in the New Testament's gifts that multiple loaded, that it would be more accurate to speak of them

as gift clusters rather than as individual gifts.
(Naden, Swanson, & Thayer, 1992, p. 1)

A second reason for clustering the gifts was to replace the King James Version terminology to "clearer contemporary understanding [that includes] multiple gifts rather than individual gifts" (Naden et al., 1992, p. 1)

A third concern revolved around the New Testaments' "random selection of gifts," and the contention that "a more complete model, . . . should take into consideration those gifts that are commonly seen in the members of contemporary congregation" (Naden et al., 1992, p. 2)

Flynn's view agrees with Naden's position. Flynn (1974) argued "that every possible gift for the church could be classified under one of the gifts in Paul's three tabulations (Rom 12:3-8; 1 Cor 12:8-10, 28-30; Eph 4:11)," and commented:

Thus, though all the gifts in the church are not actually specified in Scripture, yet every unnamed, genuine gift could be subsumed under one of the listed gifts.

In this view, each of Paul's specific gifts becomes an umbrella which shelters a group of related gifts. This concept proposes that, though all the offsprings are not specifically recorded, all the parent-gifts are named in the Pauline tabulations. In the sense of offspring registration, the New Testament is suggestive and incomplete; in the sense of parent nomenclature Paul's lists are practically exhaustive and complete.
(pp. 30-31)

Discovering Spiritual Gifts

Another key question that scholars have asked about spiritual gifts is: "How can I discover my gifts?" To many of them (e.g., Baxter, 1983; Gangel, 1975; McRae, 1976;

Murphy, 1975; Purkiser, 1975; Schramm, 1982; Tidwell, 1982; Wagner, 1979; Yohn, 1974), this is the most important question.

Gangel (1983) suggested these guidelines:

1. What do you enjoy doing?
2. What service has God been blessing?
3. How have others encouraged you?
4. What has the Holy Spirit told you?

Strauss (1976) summarized the three steps:

information about gifts, a person's inclinations, and investigation by exploring and inquiring.

Kinghorn (1976) discussed the following six guidelines (pp. 108-116): Open yourself to God as a channel for his use; examine your aspirations for Christian service and ministry; identify the needs that you believe to be most crucial in the life of the church; evaluate the results of your efforts to serve and to minister; follow the guidance of the Holy Spirit as he leads you into obedience to Christ; remain alert to the responses of other Christians.

Wagner (1976) gave five practical steps: Explore the possibilities; experiment with as many as possible; examine your feelings (what you like or enjoy doing); evaluate your effectiveness; expect confirmation from the Body. Orjala (1978) added a sixth step to this list: inner confirmation by God's Spirit (p. 35).

Jones (1985) suggested five discoveries of spiritual gifts, "considering the context in which gifts are discovered" (pp. 71-73): (1) discovery of the New Testament Scripture concerning spiritual gifts, (2) discovery of

individual abilities, strengths, and talents that match up with the biblical descriptions of the gifts, (3) discovery of affirmation from other people, (4) discovering the opportunities to use gifts, and (5) discovering the joy of fitting into the rest of the body of Christ. Jones (1985) devoted much of his discussion to the discovery of spiritual gifts, saying it is the key to effective church ministry to understand that the pastor as the facilitator of spiritual gifts discovery, and the nominating committee as a gift-search committee (pp. 73-93). Flynn (1974) agreed that the nominating committee "seeking guidance in selection of church officers" uses the principle of discovering gifts (p. 193).

Some experts tried to help Christians identify individual giftedness by using special instruments. Houts (1976) introduced an inventory with 100 statements to be rated on a scale of 0 to 3 that were to be answered based on experience, not interest. Kinghorn (1981) prepared an inventory consisting of 200 statements that the respondent would rate on a scale of 0 to 5. Edwards (1988) mentioned Robert Noble's questionnaires with 125 statements rated on a scale of 0 to 3. These instruments were self-scoring, and were simple to administer and to score. The highest scores should indicate which spiritual gifts are most evident in an individual's life.

Jones (1985) presented an inventory composed of 90 statements and encouraged subjects to look for a relationship between gifts and to discover in what areas (Gifts used in

Body Life, Gifts used in Ministry in the World, and Gifts used in Spiritual Guidance) their gifts seem dominant.

Naden first published an inventory in 1981 with co-author R. Cruise. This 57-item instrument was designed to tap the evidence of giftedness through an individual's past service experience and approximate areas of high probability of spiritual giftedness. In 1990, this instrument was revised, with 20 statements and a 5-point scale, to identify one's gift clusters instead of isolated gifts. Like the other instruments mentioned above, Naden's inventory is self-scoring and expects the subjects to give spontaneous answers "based on their inclination to perform tasks given the opportunity and means, and not exclusively on contemporary experience" (Phoon, 1986, p. 63).

Personality Factors

Cattell stated that "personality is that which permits a prediction of what a person will do in a given situation" (Cattell, 1950, p. 2). This definition is an indication of the general tone or theme of Cattell's view of the nature of personality and his approach to understanding it. His purpose or goal in studying personality is the prediction of behavior, of what a person will do in response to a particular stimulus situation. He expressed this view of personality mathematically, in the following equation:

$$R = f(P, S)$$

R stands for the response or reaction of the individual (what a person will do), S refers to a given situation or stimulus, and P stands for personality. Elements of the stimulus situation can be known and precisely defined. Indeed, in the laboratory, it is the experimenter who designs and sets up the stimulus situation. The unknown factor--the one most difficult to know--is P , the structure and function of the personality.

In Cattell's approach to personality, there is no reference to changing or modifying behavior from undesirable to desirable or from abnormal to normal. Cattell's subjects are normal individuals, whose personalities are studied, not treated. Cattell firmly believed that it is impossible (or at least unwise) to attempt to change a personality before knowing in great detail what is being changed. A valid study of personality, then, must come first. Cattell's theory did not derive from a clinical frame of reference. Rather, his approach had been a rigorously scientific one, using extensive observations of behavior and collecting data on each individual. Cattell's data came from questionnaires, objective tests and observations, and ratings of behavior as it occurs in real-life situations. The key aspect of Cattell's approach to studying behavior, and what makes it so different from all other approaches, is what he does with the considerable data thus generated. The most important concept in his theory is the factor analysis of personality traits.

Factor Analysis

The primary tool with which Cattell pursued his research was factor analysis. The essential ideas of factor analysis were introduced by Spearman (1904), a distinguished English psychologist who is best known for his work with mental abilities (Spearman, 1927). Spearman's technique for isolating single factors was revised with Thurstone's (1931) introduction of multiple factor analysis that opened the way to study complex problems and has remained the principle method of factor analysis. Having begun his career at a time when the work of Spearman was still current and that of Thurstone was a promising new achievement, Cattell incorporated many of their factor analytic orientations, techniques, and procedures into his own technical approach. At the same time, he made advances of his own and was always open to the insights of others. Schultz (1976) explained the procedure that Cattell used:

In essence, this very complex procedure involves assessing the relationship between each possible pair of measurements taken from a group of subjects. Each pair of measurements (for example, scores on two different psychological tests or on two subscales of the same test) is analyzed to determine how highly the scores correlate with each other. In other words, a correlation coefficient is determined for each pair of measurements.

If two measures show a high correlation with each other, then it is assumed that they must be measuring related aspects of personality Thus, large amounts of data are statistically analyzed to determine these common factors. (p. 257)

In Table 1, for example, two clusters of variables appear to go together. Cluster 1 consists of tests A, B, and C; cluster 2 consists of tests D, E, and F. Thus, the

TABLE 1
INTERCORRELATION BETWEEN SIX TEST VARIABLES

Test	A	B	C	D	E	F
A Mistrust						
B Ego instability	.72					
C Guilt	.45	.49				
D Verbal comprehension	.02	.04	.07			
E Mathematical ability	.08	.18	.00	.58		
F Word fluency	.16	.04	.10	.62	.48	—

investigator starts with a large number of surface variables and seeks to reduce them to a few common source factors that can be used to predict the variation in the original measures. Variables that are strongly intercorrelated are considered to be measuring, to a great extent, the same entity or factor. The problem facing the investigator is that he/she must then eventually label these underlying factors. Since his/her judgments are subjectively based interpretations that have important implications for future theorizing and research, considerable skill and care must be exercised in the labeling process.

Cattell argued that factor analysis can isolate underlying causal influences in the human personality; this position contrasts with that maintained by the majority of personality psychologists who regard factor analysis as a useful technique for identifying potentially important descriptive dimensions, but independent investigations must be undertaken to assess the construct validity of factor analytically derived dimensions. That is part of the "reason

that the theory has not received wider recognition in psychology" (Schultz, 1976, p. 258).

The Trait Approach to Personality

The concept of traits is at the core of Cattell's view of personality. Other psychologists, such as Gordon Allport, also developed theories of personality around the concept of traits, but no one else has given such a detailed analysis and classification of traits. Schultz (1976) said:

[Cattell] viewed traits as mental structures--the elements or component parts of personality. Only when we know which traits characterize an individual are we in a position to predict what he or she will do in a given situation. Cattell defines trait as a reaction tendency of a person that is a relatively permanent part of his or her personality. To fully understand a person, then, we must know in precise terms the entire pattern of traits that defines that person as an individual. (pp. 257-258)

One of several ways in which Cattell classified traits is the distinction between ability, temperament, and dynamic traits. Ability traits refer to the person's skill in dealing with the complexity of a given situation. Intelligence would be a good example of an ability trait in Cattell's scheme. Temperament traits refer to the stylistic tendencies of the individual. For instance, people may be either chronically irritable, moody, easygoing, or bold. Dynamic traits refer to the motivation and interest of the person. A person may be characterized, for example, as ambitious, power-oriented, or interested in athletics (Cattell, 1965, p. 28).

Traits can also be grouped in terms of the number of people who possess them. Thus, a common trait has much the same form for everyone, and people differ from one another only in the strength of the traits. At the other end is the unique trait. It is so specific to one particular person that no one else could be measured on it.

The distinction between surface and source traits is probably the most important contribution Cattell made. Surface traits are groups of observations that are correlated, but such observations are superficial in that they explain nothing. They are simply a statement of what kind of characteristics tend to be grouped together (correlated). Such characteristics can, and probably do, have many causes. Because they are composed of several elements, surface traits are less stable in nature and less important in understanding of personality. In Cattell's view, a surface trait is "simply a collection of trait elements, of greater or lesser width of representation that obviously 'go together' in many different individuals and circumstances" (Cattell, 1950, p. 21).

Source traits, on the other hand, are the causes of behavior. They constitute the most important part of a person's personality structure and are ultimately responsible for all of a person's consistent behavior. A source trait is "a factor-dimension, stressing the proposition that variations in value along it are determined by a single, unitary influence or source (Cattell, 1965, p. 375). Thus,

every surface trait is caused by one or more source traits, and a source trait can influence several surface traits. Schultz (1976) said: "Source traits are the individual factors that derive from factor analysis and that, in combination, account for some surface trait. Source traits, therefore, are the basic elements of personality" (p. 262).

Source traits may be divided into constitutional traits and environmental-mold traits; the former are internal, or within the skin, and have some basis in heredity. Environmental-mold traits come from the environment and are molded by events which occur outside the skin (Cattell, 1946, pp. 68-69).

For Cattell, the search for source traits started by measuring everything one can measure about a large group of people. The measures were then intercorrelated, and a cluster analysis indicated which measures tended to measure the same things. Such factor analysis yielded surface traits. The surface traits were then analyzed to see which of them tended to be related to each other--in other words, which were stimulated by the same source. Such an analysis provided information about source traits.

Major Source Traits

To reveal the underlying structure of personality, Cattell and his co-workers spent approximately 40 years in measuring the behavior of individuals who differ in age, occupational status, and cultural background. By means of three data-collection techniques, they found approximately 20

basic traits (Cattell, 1965, p. 64). These source traits were initially labeled factors A-T, but later, as more and more evidence accumulated, the factors were further identified and given labels. Sixteen of these basic traits were included in the construction of the Sixteen Personality Factor Test. The trait names of these factors are shown in Table 2. The traits are listed in terms of their importance in controlling variation in behavior, starting with factor A and ending with factor Q₄. Thus, the possession of information about a person's intelligence (factor B) allows an investigator to predict his performance on given tasks more effectively than would knowledge about his dominance (factor E).

The Specification Equation

It is a most complex task to predict a person's behavior. Although Cattell has been able to isolate and measure reliably a number of key source traits in personality, he still recognized that any viable theory of human functioning must be able to predict individual differences in behavior accurately. Under ideal circumstances where the psychologist can identify the relevant variables and precise means of measuring them, the individual's behavior in a given situation can be predicted through substituting the appropriate scores or values. Cattell has devised a mathematical formula that allows investigators to make such predictions in the following equation (Cattell, 1965, p. 78-80):

TABLE 2

MAJOR SOURCE TRAITS ON THE SIXTEEN PERSONALITY FACTOR TESTS

Low Score Description	Factor		Factor	High Score Description
Reserved (Detached, Critical)	A-	vs	A+	Outgoing (Warmhearted)
Less Intelligent (Concrete-thinking)	B-	vs	B+	More Intelligent (Abstract-thinking)
Emotional (Affected by Feelings)	C-	vs	C+	Stable (Mature, Calm)
Humble (Submissiveness)	E-	vs	E+	Assertive (Dominance)
Sober (Restrained)	F-	vs	F+	Happy-go-lucky (Enthusiastic)
Expedient (Low superego)	G-	vs	G+	Conscientious (High superego)
Shy (Threat-sensitive)	H-	vs	H+	Venturesome (Bold, Uninhibited)
Toughminded (Self-reliant)	I-	vs	I+	Tender-minded (Sensitive)
Trusting (Accepting Conditions)	L-	vs	L+	Suspicious (Hard to Fool)
Practical (Steady)	M-	vs	M+	Imaginative (Absent-minded)
Forthright (Naivete)	N-	vs	N+	Shrewd (Shrewdness)
Placid (Assurance)	O-	vs	O+	Apprehensive (Guilt-proneness)
Conservative (Conservatism)	Q1-	vs	Q1+	Experimenting (Radicalism)
Group-tied (Group adherence)	Q2-	vs	Q2+	Self-sufficient (Self-sufficiency)
Casual (Low integration)	Q3-	vs	Q3+	Controlled (High self- concept)
Relaxed (Low Tension)	Q4-	vs	Q4+	Tense (Frustrated)

$$R = b_1A_1 + b_2B_2 + b_3C_3 + \dots + b_nK_n$$

Where:

R--performance or response

A, B, C, ...K--source traits

b--weights or behavioral situation indices.

These weights are unique to each factor or source trait and show the degree to which each is involved in the situation under consideration (Cattell, 1965, pp. 78-80).

These weights for specific situations are generated by experimentation in which the performances of large groups of individuals are assessed and the relative importance of certain source traits is determined by factor analysis. Then these weights are used in the general equation, along with the individual's own scores, as a means of predicting performance.

Personality of Religious Individuals

It has been strongly suggested that different occupational groups are characterized by specific personality profiles (Cattell & Scheier, 1965), and certain aspects of performance are predictable from personality structure (Cattell & Stice, 1954).

Research has been conducted to correlate personality factors with occupations such as nurses (Adams & Klein, 1970; Stewart, 1966), educational administrators (Allen, 1967; Long, 1970), teachers (Null, 1971; Williams, 1968), ministers (Banks, 1966; Chalmers, 1969), chief executives (Coleman &

Riley, 1970), counselors (Donnan, Harlan, & Thompson, 1969), psychologists (Bachtold & Werner, 1970), athletes (Givone, 1969; Knapp, 1965; Kroll, 1967; Straub, 1971), engineering managers (Hay, 1966), swimming coaches (Hendry, 1969), radar controllers (Karson & O'Dell, 1971), fire fighters (Lowe-Holmes, 1971), artists (Drevdahl & Cattell, 1958; Mason, 1967), musicians (Shatin, Kotter, & Longmore, 1968), medical specialists (Mattie, 1970), nuns (Pallone, Driscoll, & Droba, 1969), and supervisors (Titus, 1969). . Personality profiles of the other professions, such as accountants, clerical workers, cooks, editorial workers, farmers, janitors, military cadets, miners, policemen, salesmen, scientists, social workers, technicians, and writers are also available (Cattell, Eber, & Tatsuoka, 1970, pp. 187-228).

Menges and Dittes (1965) comprehensively reviewed some 700 psychological studies of clergymen. Research has been undertaken on the personality features of some discrete religious population, for example: prospective overseas mission appointees (Schroeder, 1958), a higher incidence of functional emotional disorders among the religious than among the general population (Moore, 1936a; 1936b), elevated MMPI scores of religious personnel (Barry & Bordin, 1967).

While some 200 studies have investigated the personality of religious personnel (Menges & Dittes, 1965), comparatively few have investigated the personality structure of Protestant clergymen, not all with the same conclusions. Query (1966) studied candidates for ordination, successful

and unsuccessful, and found significant differences on five scales in the California Psychological Inventory. Siegelman and Peck (1960) concluded that clergymen showed a greater need to dominate, whereas Roe (1956) found clergymen to be low on dominance.

Chalmers (1969) utilized the 16 PF to determine whether there were systematic differences among personality traits which correlate with measures of performance among Seventh-day Adventist clergymen. He concluded that "there were significant differences in eleven out of sixteen trait means between the ministers and the general adult population" (p. 27).

Special interest was given to theological students to investigate their personality patterns: an evaluation of prospective theology students as a part of their entrance requirements to graduate seminaries (Knief, 1966), a study on the consistency of elevated MMPI profiles from Catholic and Lutheran seminarians (Dunn, 1965), and a similar study on Concordia seminarians (Nauss, 1968). Kimber (1947) reported that the students in a Bible institute had high social standards, a high sense of personal worth, and a high number of nervous symptoms, and their prevailing interest was in social service. Childers and White (1966) observed a homogeneity of personality behavior on each of 16 factors from 72 male students in a southern theological institution. They concluded that theological students were different from the general population means in terms of a stronger conscien-

tiousness, high self-concept control, seriousness and introspection, sensitivity, gentility, and dependency as measured by the 16 PF.

Banks (1966) investigated selected social and psychological variables relevant to satisfaction with the role of minister among the Seventh-day Adventist seminary students and concluded that three personality factors (H, N, and Q₄) were significantly related to role satisfaction.

In her study, Johnson (1943) described seminary student responses as concluding that "dominance and self-sufficiency occurred more frequently than other traits" (p. 329). She was interested in the possible use of personality questionnaires as a basis for the tentative prediction of success or failure in the field of religious work, because "many failures in parishes and on the mission field are due to difficulties in personal adjustments and in maintaining successful human relations" (p. 329).

Some research on the psychological aspects of clergy dealt with personality and ministry issues. Wagner (1957) noted that personality traits correlated with the different counseling methods when the studied group was divided into psychologically trained and untrained groups. Lucassen (1963) derived a leadership score from a test that was factor analyzed and found that two variables (initiative, and capability for insight and expression) correlated with leadership qualities.

Oden (1964) hypothesized about the relationship between personality and preaching, and confirmed: (1) a preacher with a personality oriented towards people tends to preach people-oriented sermons, (2) a preacher with a personality oriented away from people tends to preach concept-oriented sermons, and (3) a preacher with a personality oriented against people tends to preach verdict-oriented sermons.

Summary

Among several Greek words that are translated 'gift' in the New Testament, charisma uniquely expresses Paul's theology of spiritual gifts, whereas Paul's various terms for gifts show that the way Christians use their gifts is diverse. Three different Greek words in 1 Cor 12:4-6 (charismata, diakoniai, and energemata) that describe the gifts of the spirit teach something about the nature and purpose of spiritual gifts: the origin of the gifts; the way in which they are experienced in the church; and the results of ministry using spiritual gifts.

There have been various suggestions to differentiate spiritual gifts from natural talents, but two positions are noteworthy. One is that spiritual gifts are not related with talents, and the other is that they are virtually the same. Those who view the conversion experience as the act of giving one's natural talents to God, and then receiving them

back as spiritual gifts, are comfortable with the idea of spiritual gifts and personality being intimately correlated.

Personality profiles were studied and developed by Cattell's factor analysis, and much research has been done to find the correlation between personality patterns and different vocations. According to Menges and Dittes (1965), several hundred research projects have been devoted to the psychological aspects of clergy. Some studies have revealed that personalities are significantly correlated with different approaches to ministry by clergy.

CHAPTER III

METHODOLOGY

Type of Study

This study used the six different procedures of the multiple regression: the full model, forward selection, backward elimination, stepwise procedure, R-squared procedure, and Mallow's C(p) procedure. These statistical procedures were used to select the best subsets of predictors for each of the five spiritual gifts clusters.

Population and Sample

The population of this study consisted of selected students and their spouses of the Seventh-day Adventist Theological Seminary and selected undergraduate students of Philippine Union College enrolled during the first semester of 1992. The selected students and their spouses of the Seventh-day Adventist Theological Seminary were a multi-racial group (Caucasians, Blacks, Hispanics, Asians, etc.), but dominantly Caucasian. However, despite some racial diversity they are considered representative of the broad North American cultural group, since more than 70% are North Americans. They are consisted of 346 males and 91 females.

Random sampling procedure was employed in selecting

subjects for the study among the undergraduate students of Philippine Union College. Undergraduate classes with 15 or more students were randomly numbered and 21 classes were randomly selected.

The size of the total sample was planned according to Maurice Kendall's recommendation in Multivariate Analysis (1975) to have "at least ten times as many observations as variables" (p. 11). Since there are 16 personality factors and five spiritual gifts clusters, the following formula yields 210 subjects per group:

$$(16 + 5) \times 10 = 210.$$

In order to be more confident of the stability of the correlation matrix, a larger sample was sought, approaching 15 times as many observations as variables:

$$(16 + 5) \times 15 = 315 \text{ subjects.}$$

As it was planned to study two subgroups--seminarians and Filipinos--the number of subjects needed was between 210 and 315 subjects for each of the subgroups.

Instrumentation

To measure personality factors and spiritual gifts clusters, it was necessary to select appropriate instruments. Two such instruments were utilized in this study: The Sixteen Personality Factor Questionnaire (16 PF), Form A by R. B. Cattell, D. R. Saunders, and G. F. Stice (1949), and the New Spiritual Gifts Inventory (NSGI) by R. C. Naden (1990b).

Sixteen Personality Factor Questionnaire
Formation

Cattell assumed that one could account for most of the information contained in the 4,504 adjectives with a small number of concepts. The primary tool with which Cattell had pursued his research was factor analysis. The basic problem with factor analysis was deciding what would be the precise number of factors needed to account for the larger number of variables or factors--in this case, 4,504. Then, he had to determine how few factors would be appropriate. Karson and O'Dell (1976) said:

These two problems--(1) finding out how few factors are needed to account for the larger number of variables, and (2) finding the relationship of the larger number of variables to the smaller number of factors--are the two basic problems that must be solved in any factor analysis. (p. 28)

Factor analysis is an extremely complex statistical process, which allows one to reduce a large number of concepts, such as 4,504 words, to the smallest number of underlying factors that would still account for most of the original information.

Cattell grouped the 4,504 words by sophisticated inspection into 171 categories, then reduced them to 36 categories, which he called surface traits, by correlational methods. The 36 categories could be handled by the methods available at the time and were factor analyzed. From them, a final group of 16 traits with the greatest variance were selected (Cattell, Eber, & Tatsuoka, 1970). There were also

additional second-order factors derived from a factor analysis of these 16 primary factors. These second-order factors describe broader aspects of human personality; many seem to be found in almost all scientifically developed personality tests (Lorr, Nerviano, & Myhill, 1985).

Subsequent editions of the 16 PF, including the construction of parallel forms (possibly better referred to as extended, repeated measurement forms), were published in 1956-57, 1961-62, and 1967-69.

Reliability

The consistencies of the 16 PF scales, that is, the agreement of the factor score with itself under changing conditions, are given in all relevant ways. Cattell, Eber, and Tatsuoka (1970) said:

The degree of reliability of a test--its agreement with itself when the administration is repeated on the same group--hinges partly on the construction of the test itself, partly on its mode of administration, and partly on its manner of scoring. The conspect reliability coefficient (agreement between two scores) evaluates the last mentioned, and, since the 16 PF is an objectively key--or machine--scored test, the conspect coefficients are potentially perfect, i.e., equal +1.0. (pp. 29-30)

The first type of consistency to consider is reliability or the agreement of the factor score over time. Reliability may be further subdivided into (1) dependability, i.e., short-term test-retest correlations, and (2) stability, i.e., retest after a longer interval. The dependability coefficients, with intervals of 2 to 7 days, were reported in the Manual for the 16 PF (see Table 3).

The stability coefficient, i.e., from a retest after a 2-month or longer interval, was also reported in the same manual (see Table 4).

The equivalence coefficient, that is correlation between alternate test forms (e.g., Forms A and B), was also presented in the manual as tests of reliability. This makes sense if forms are to be given in combination, since the equivalence coefficient would be, in essence, a split-half reliability. Adcock (1959) reported that on a general population sample of 450, the corrected split-half reliabilities of the factor scores range from .71 to .93, 10 coefficients being above .80, which was "quite good" (p. 198).

In its most recent standardization, norms were collected on over 15,000 people. Karson and O'Dell (1989) stated that reliability of the test is adequate (p. 64). Bloxom (1978) and Butcher (1985) also agreed that the estimates of reliability for combined forms based on test-retest correlations are generally satisfactory for the 16 PF.

Validity

Cronbach and Meehl (1955) have examined the construct validity in psychological testing and discussed four types of validation--namely, predictive validity, concurrent validity, content validity, and construct validity (p. 282). In this study four types of validity are examined: concept (construct) validity, content validity, predictive validity,

TABLE 3

16 PF DEPENDABILITY COEFFICIENTS

Form	A	B	C	E	F	G	H	I	L	M	N	O	Q ₁	Q ₂	Q ₃	Q ₄
A ^a	86	79	82	83	90	81	92	90	78	75	77	83	82	85	80	72
A ^b	81	58	78	80	79	81	83	77	75	70	61	79	73	73	62	81

^a Canadian subjects: N = 243 high school males and females.

^b American subjects: N = 146; 79 employment counselors and 67 undergraduate students.

Note: Decimal points are omitted.

TABLE 4

16 PF STABILITY COEFFICIENTS

Form	A	B	C	E	F	G	H	I	L	M	N	O	Q ₁	Q ₂	Q ₃	Q ₄
A ^a	80	43	66	65	74	49	80	85	75	67	35	70	50	57	36	66
A ^b	49	28	45	47	48	54	49	63	40	43	39	57	52	46	41	56
A ^c	62	23	48	52	52	46	64	53	42	49	21	52	51	50	41	51

^a Two-and-one-half-month interval, N = 44.

^b Four-year interval, N = 432 males.

^c Four-year interval, N = 204 females.

Note: Decimal points are omitted.

and universal validity.

Concept validity

Concept (or construct) validity means the validity of the test itself. Some forms of the 16 PF contain validity scales; for example, Form A contains three validity scales: a fake-bad scale, a random response scale, and a motivational distortion (fake-good) scale.

The authors of the Handbook for the 16 PF divided their validity assessment efforts into direct and indirect construct (or concept) comparisons. The direct validity was evaluated by correlating the scale score with pure factors it was designed to measure. The table of direct concept validity (Cattell et al., 1970, p. 35) given by the authors showed in the form of multiple correlation coefficients, representing the degree of relationship between each of those items that load the particular personality factor and the magnitude of the factor itself. Forms A and B were reported to have the greatest total direct validity where each form has seven scales, with validity coefficients of at least .70 magnitude. Indirect validities were also reported in the form of multiple correlation coefficients, representing the degree of relationship between each primary scale magnitude and the total remaining primary scale magnitudes in the 16 PF. The authors referred to this form of investigation as relating each specific factor with all other factors, namely, comparing all of what is "A" with all of what is determined as "not-A." As might be anticipated, correlational

coefficients fell below a .80 magnitude in only two instances: .63 for N factor and .74 for M factor (Cattell et al., 1970, p. 39).

Karson and Pool (1957) investigated construct validity of the 16 PF by means of correlating its factors with the Minnesota Multiphase Personality Inventory (MMPI) scales and their conclusion included that: "(a) both the 16 PF Test and the MMPI measure certain common areas of personality; (b) the 16 PF Test has certain advantages over the MMPI, inasmuch as it contains fewer items, but apparently possesses greater breadth" (p. 251).

Content validity

Cunningham (1986) defined the content-related validity "as the degree to which the set of items included on a particular test are representative of the entire domain of items that the test is intended to assess" (p. 127).

Cattell's item factor analysis (1972) concluded that "the pursuit of maximum simple structure yields with a high degree of statistical significance the 16 particular factor patterns said to be there" (p. 186). Adcock, Adcock, and Walkey (1974) attempted to verify the 16 PF primary scales by interpretation of the psychological content of all items that defined the rotated factors and concluded: "the factors which do emerge are in many cases strikingly similar to the 16 PF factors as described" (p. 136). Becker (1961), Cattell and Gibbons (1968), and Cattell (1974) analyzed the 16 PF

parcels or scales separately, or in combination with parcels or scales from Guilford's inventories, and produced consistently positive conclusions. Although the studies on the validity of the 16 PF were not unanimous in their support, Bolton (1978) said, "the scientific foundation of the 16 PF is at least as solid as that of its major competitors" (p. 1080).

Predictive validity

Cattell and Eber (1964) reported an equation for predicting school grades based on certain personality factors. On the basis of this, Ayers and Bashaw (1969) studied the validity of the 16 PF in predicting high school academic achievement and supported the interpretations given by the 16 PF authors by stating that the correlation patterns of the 16 PF for predicting certain academic achievement fairly accurately describe the difference between good and bad students (p. 484).

The 16 PF was also used to point out potential or existing behavior difficulties, such as delinquency (Cowden, Schroeder, & Peterson, 1971) and anxiety (Gorman, 1970). It was also used as an aid in planning individualized programs for students; personnel selection and decision making (Porter, 1970); vocational guidance (Cattell, Day, & Meeland, 1956); clinical diagnosis (Hayward, 1970); and predictors of marital dimensions (Barton & Cattell, 1972). The 16 PF is generally accepted as an effective instrument to measure personalities and to predict certain characteristics.

Universal validity

Since part of the population of this study was Filipino, it was necessary to see if the 16 PF has any universality. The authors of the Handbook mentioned that one of the properties of the 16 PF in the area of validity is

a set of factors demonstrated to retain their conceptual validities as unitary source traits in other cultures, e.g., in French, Italian, German, Japanese, etc., translations, thus showing that its concepts are of substantial scientific universality. (Cattell et al., 1970, p. 14)

According to the Philippine Psychology Cooperation, the agency that administers the 16 PF in the Philippines, the 16 PF is widely used for Filipinos without language barriers, because Filipinos use English as their official language. They also use the universal norms of the 16 PF as their national norms for the Filipino population. The Handbook for the 16 PF also provided a cross-cultural personality profile (sten means and standard deviations) which included the Filipino sample. It showed that they used the college student norms for Filipinos to convert their raw scores to stens on the basis of universal norms (pp. 254, 255).

The New Spiritual Gifts Inventory

Formation

The original Spiritual Gifts Inventory (SGI, 1981) was designed to make it "possible for Christians to answer questions regarding past service experiences that would approximate areas of high probability of spiritual giftedness" (Phoon, 1986, p. 62). In spite of some assets,

the SGI had serious liabilities: (1) "Lack of success in attempts to separate factors," (2) outdated gift names derived from the King James Version, (3) "inadequacy of a spiritual gifts model that includes only those gifts specifically named in the New Testament" (Naden, Swanson, & Thayer, 1992, pp. 1-2). The authors of the article, concerning the formation of a new inventory, stated:

With these three considerations in mind, an attempt was made to "cluster" the gifts based on both the observed points of commonality between some gifts in the biblical narrative and the results of the factor analysis used in the development of The Spiritual Gifts Inventory. The results of this work led to the development of the New Spiritual Gifts Inventory (NSGI, Naden, 1990), and has been widely used by many different denominations since that time. (Naden et al., 1992, p. 2)

The instrument is Likert-style and self-scoring, is composed of 20 statements, and asks responses on a 5-point scale. The total scores of each five-column factors range from 4 to 20. The factor(s) with the highest score represents the area(s) of most probable giftedness. The subjects are encouraged to consider the responses from two perspectives: primarily, the degree to which these statements have been true or false in their lives, or alternatively, what they believe their response would have been if they had had the opportunity to be involved in the activity described.

Reliability

The author of the NSGI used test-retest reliability measurements to provide a reliability coefficient. The

Manual (Naden, 1990a) presented test-retest results after the NSGI was administered twice with a set day interval between testings (see Table 5).

TABLE 5
RELIABILITY COEFFICIENTS (TEST-RETEST) FOR EACH ITEM
AND SPIRITUAL GIFTS CLUSTER

Gift	Item	Reliability Coefficient	Group
Teacher	A	.9376	.9716
Teacher	F	.8281	
Teacher	K	.7967	
Teacher	P	.9409	
Shepherd	B	.9116	.8973
Shepherd	G	.7684	
Shepherd	L	.7000	
Shepherd	Q	.7977	
Supporter	C	.7560	.8357
Supporter	E	.7209	
Supporter	M	.7290	
Supporter	R	.7798	
Counselor	D	.6886	.9061
Counselor	I	.7755	
Counselor	N	.7333	
Counselor	S	.8889	
Leader	E	.7736	.8206
Leader	J	.8244	
Leader	O	.7271	
Leader	T	.6997	

Validity

Validity was carried out in a two-part study by the author of the NSGI. The first study concerned whether the NSGI items represent the factors (spiritual gifts clusters). This question is at the heart of construct validity of the NSGI. The Manual also provided the results of the factor analysis (see Table 6).

In the second part of the study the items were

submitted to a panel of experts to identify what factors were represented on each of the 20 items. The study yielded coefficients of agreement that ranged from .87 (4 items) to 1.00 (16 items) (see Table 7).

TABLE 6
NSGI ITEMS WITH FACTOR LOADINGS (>.5)
 BY EACH FACTOR (N = 859)

		Factors				
		1	2	3	4	5
A	0.838					
F	0.775					
K	0.736					
P	0.706					
B	.....		0.636			
G	.....		0.587			
L	.....		0.519			
Q	.....		0.501			
D	.....			0.710		
I	.....			0.700		
S	.....			0.624		
N	.....			0.624		
E	.....				0.664	
J	.....				0.649	
O	.....				0.607	
T	.....				0.535	
C	.....					0.684
H	.....					0.641
M	.....					0.581
R	.....					0.537

TABLE 7
 AGREEMENT OF EXPERTS FOR NSGI

Item	Gift	Coefficient of Agreement
A	Teacher	1.00
F	Teacher	1.00
K	Teacher	.87
P	Teacher	1.00
B	Shepherd	.87
G	Shepherd	.87
L	Shepherd	1.00
Q	Shepherd	1.00
C	Supporter	1.00
H	Supporter	1.00
M	Supporter	1.00
R	Supporter	1.00
D	Counselor	1.00
I	Counselor	.87
N	Counselor	1.00
S	Counselor	1.00
E	Leader	1.00
J	Leader	1.00
O	Leader	1.00
T	Leader	1.00

Procedure for Collecting Data

The data from the Seminarian group was collected by the Seventh-day Adventist Theological Seminary at Andrews University from 1989 to 1992. At the time of their enrollment in graduate school, the seminarians and their spouses were invited to participate in this study by completing both the NSGI and the 16 PF. The accumulated number of subjects was 437. Upon their participation, the subjects agreed to have their test scores released for the research on the relationship between spiritual gifts and personality factors.

On May 5, 1992, a letter requesting permission to carry out surveys with a cross-section of the students at Philippine Union College was sent to the Dean of the Graduate School (see Appendix A). The researcher obtained authorization from Philippine Union College on August 24, 1992, and visited the campus in the Philippines to request a list of all the undergraduate classes with the names of the teachers and the number of students in the class, during the first semester, 1992. Undergraduate classes with 15 or more students were randomly numbered and 21 classes were randomly selected. The teachers of the classes were approached for permission to take 5 minutes of the class time to explain the two instruments (the 16 PF and the NSGI) and to invite the students to meet in an auditorium with the students from the other classes to take the questionnaire tests together at the end of the class period. About 100 students were gathered at a time to spend about an hour on the tests.

Hypotheses and Statistical Analysis

For the purpose of statistical analysis the hypotheses are stated here in the null form.

Hypothesis 1

Among the seminarian respondents, there is no significant multiple correlation between each of the spiritual gifts clusters and personality factors indicated by the 16 PF.

Hypothesis 2

Among the Filipino respondents, there is no significant multiple correlation between each of the spiritual gifts clusters and personality factors indicated by the 16 PF.

The hypotheses were tested with six statistical procedures of the multiple-regression analyses (full model, forward selection, backward elimination, stepwise procedure, R-squared procedure, and Mallow's $C(p)$ procedure). These various techniques were used in the selection of personality factors that best describe or predict the spiritual gifts clusters. A full discussion of these various multiple regression techniques is presented in Chap. 4.

For hypotheses each of the spiritual gifts clusters indicated by the NSGI was taken as a dependent variable with the 16 personality factors indicated by the 16 PF as independent variables. The criteria in selecting the best prediction model were as follows: (1) The selected "best" model should account for at least 10% of the variance in the criterion variable. That is, $R^2 > 0.10$; (2) R^2 is significant at $\alpha = 0.05$; (3) the multiple R-squared was at least 1% better than other models; and (4) the selected model must be incorporated with hypothesized variables.

The statistical treatment of data was performed on the computer at the Center for Statistical Services of Andrews University. The data file includes sten scores of the 16 personality factors from the 16 PF and raw scores on

each of the five spiritual gifts clusters of the NSGI.

Summary

This chapter has presented the research design and methodology of a possible canonical correlation between personality factors and spiritual gifts clusters, and multiple regression of each of the five spiritual gifts clusters with personality factors. The Sixteen Personality Factor Questionnaire and The New Spiritual Gifts Inventory used in this study were described. Procedures for selecting the sample, gathering the data, and performing the statistical analyses were also explained. Two hypotheses in their null form were stated.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

This chapter presents the analyses of the data concerning the possible relationship between 16 personality factors and five spiritual gifts clusters and the best prediction models of personality factors for each of the spiritual gifts clusters. The results and discussion of the results are presented in order of the hypotheses listed in chapters 1 and 3.

Description of Sample

The subjects in this study were selected students and their spouses of the Seventh-day Adventist Theological Seminary, Berrien Springs, Michigan (1989-1992), and selected undergraduate students of Philippine Union College, Silang, Philippines, enrolled during the first semester of 1992. At the time of their enrollment in graduate school, the seminarians and their spouses were invited to participate in this study by completing both the NSGI and the 16 PF. The accumulated number of subjects was 437 (346 males and 91 females). The selected students and their spouses of the Seventh-day Adventist Theological Seminary were a multi-racial group (Caucasians, Blacks, Hispanics, Asians, etc.),

but dominantly Caucasian. However, despite some racial diversity, they are considered representative of the broad North American cultural group, since more than 70% are North Americans.

Four hundred and ten sets of instruments were administered to students in 21 undergraduate classes of Philippine Union College. Four hundred and three subjects responded producing 399 sets of usable returns. The subjects in the Filipino sample were the students of various majors (e.g., Theology, English, Psychology, etc.) and consisted of 206 males and 193 females.

Tables 8 and 9 show the means and standard deviations of the seminarian and Filipino samples--437 seminarians and 399 Filipinos. The scores of the spiritual gifts clusters were the raw scores; the higher scores represent the area(s) of more probable giftedness. The scores of the 16 personality factors are in sten scores (ten equal-interval standard score points from 1 through 10).

For the seminarian sample, the mean score for each of the five spiritual gifts clusters of NSGI ranged from 16.4 (standard deviation of 2.9) to 15.1 (standard deviation 2.3). Based on a possible score of 20 for each cluster, the data suggest that these seminarians score quite high on the five spiritual gifts clusters. Among the personality factors for the seminarian sample, factor B had the highest mean, 6.9, and a standard deviation of 1.8. Factor Q₁ had the lowest mean, 4.9, and a standard deviation of 1.9. The scores on

each of the 16 factors were within the normal ranges.

For the Filipino sample, the mean score for each of the five spiritual gifts clusters ranged from 16.5 (standard deviation 2.7) to 14.7 (standard deviation 3.2). Similar to the seminarians, the Filipinos scored quite high on the five spiritual gifts clusters. Among the personality factors for the Filipino sample, factor N had the highest mean, 6.7, and a standard deviation of 1.9. Factor F had the lowest mean, 3.5, and a standard deviation of 1.4. The scores on each of the 16 factors were within the normal ranges.

Testing of Hypotheses and Discussion of the Findings

The statistical tool used for examining the relationship between the 16 personality factors and the five spiritual gifts clusters was multiple regression.

It is true that the correlation matrices (Appendix C) show that spiritual gifts clusters are correlated with each other, which suggests that persons may have more than one of the five spiritual gifts, but the purpose of this study was to find unique prediction models for each spiritual gifts cluster by univariate analysis which considers each variable as a single source of variance.

For the two hypotheses, multiple regression procedures were used to determine the best-fitting regression model for describing the relationship between each of the five spiritual gifts clusters and the 16 personality factors. Since this is highly exploratory, six multiple regression

TABLE 8
MEANS AND STANDARD DEVIATION FOR THE VARIABLES OF
THE SEMINARIAN SAMPLE (N = 437)

=====		
Variable	Mean	Standard Deviation
<hr/>		
1. Teacher	16.371	2.980
2. Shepherd/Evangelist	15.121	2.980
3. Support	15.314	2.829
4. Counsel	15.108	2.343
5. Leader	15.831	2.573
6. Factor A	5.808	2.085
7. Factor B	6.950	1.837
8. Factor C	5.188	1.806
9. Factor E	5.245	2.024
10. Factor F	5.229	2.153
11. Factor G	5.872	1.799
12. Factor H	5.691	2.108
13. Factor I	6.863	1.829
14. Factor L	5.913	1.918
15. Factor M	5.492	1.854
16. Factor N	6.027	2.109
17. Factor O	5.572	1.847
18. Factor Q ₁	4.947	1.852
19. Factor Q ₂	6.135	1.966
20. Factor Q ₃	5.744	1.918
21. Factor Q ₄	6.089	1.901
<hr/>		

TABLE 9
MEANS AND STANDARD DEVIATION FOR THE VARIABLES OF
THE FILIPINO SAMPLE (N = 399)

=====		
Variable	Mean	Standard Deviation
<hr/>		
1. Teacher	14.747	3.206
2. Shepherd/Evangelist	16.391	3.025
3. Support	16.486	2.667
4. Counsel	15.722	2.657
5. Leader	16.098	2.513
6. Factor A	5.308	1.613
7. Factor B	4.722	2.004
8. Factor C	4.957	1.719
9. Factor E	5.759	1.583
10. Factor F	3.514	1.383
11. Factor G	6.291	1.560
12. Factor H	5.381	1.590
13. Factor I	5.810	1.911
14. Factor L	5.684	1.906
15. Factor M	4.852	1.779
16. Factor N	6.689	1.864
17. Factor O	6.373	1.819
18. Factor Q ₁	5.584	1.696
19. Factor Q ₂	5.068	1.710
20. Factor Q ₃	6.449	1.780
21. Factor Q ₄	5.000	1.561
<hr/>		

procedures were tested to select the best regression models. These were: (1) the full model, (2) the forward selection, (3) the backward elimination, (4) the stepwise procedure, (5) the R-squared procedure, and (6) the Mallow's C(p) procedure.

Full model: Sometimes called the standard regression model, this procedure is the default in most major statistical packages. This procedure provides no model selection capability. In this procedure, all independent variables (IVs) enter into the regression equation simultaneously.

Each one is assessed as if it had entered the regression after all other IVs had entered. Each IV is evaluated in terms of what it adds to prediction of the dependent variable (DV) that is different from the predictability afforded by all the other IVs. (Tabachnick & Fidell, 1989, p. 143)

Forward selection: The forward selection technique begins with no variables in the model. Then the variable most highly correlated with the dependent variable is entered. The next predictor variable entered is the one with the highest partial correlation with the dependent variables, with the effects of the first variable partialled out. The result is that this variable will have the greatest increase in R^2 ; that is, the predictor variable that accounts for the greatest remaining variance in the dependent variable after the effect of the first predictor variable has been removed. Subsequent variables are similarly selected until the increase in R^2 is no longer statistically significant or all the independent variables are included (Hinkle, Wiersma, & Jurs, 1988). The criteria for selecting the "best" model in

this procedure was that the predictor variable must contribute at least 1% of the variance in the criterion variable. In most cases, this resulted in selected variables significant at the 0.05 level.

Backward selection: The backward elimination technique begins by calculating statistics for the full model; that is, all predictor variables are entered into the equation. Then variables are deleted from the model one by one if they do not make a significant contribution to the regression model (Hinkle et al., 1988). Again, the criteria used in the procedure was that for predictor variables to stay in the equation, they must be able to "explain" at least 1% of the variance.

Stepwise procedure: The stepwise procedure is a variation of the forward selection technique. The predictor variable is selected in a similar manner, with the exception that at each step after a new predictor variable is added to the model "another significance test is conducted to determine the contribution of each of the previously selected predictor variables, as if it were the last variable entered" (Hinkle et al., 1988, p. 479). Thus, it is possible that a variable may be dropped from the model if its contribution in combination with the newly selected predictor variables is deemed insignificant. As in the forward and backward selection procedure, the criteria for inclusion in the model was that the variable must contribute at least 1% of the variance. Again, in most cases, the predictor variables were

significant at the 0.05 level.

R-squared procedure: This procedure uses the "all-possible-subset" approach in which subsets of independent variables that best predict a dependent variable by linear regression are found. The subsets found are optimal in terms of R^2 . In the Statistical Analysis System (SAS), the REG procedure with SELECTION = R-SQUARE generates subsets of one-variable models, two-variable models, three-variable models, and so on. The models in each subset are arranged in descending order according to R^2 . Obviously, the model with the highest R^2 will be the full model (SAS/STAT User's Guide, 1988). The task for the researcher is to choose which one he/she would consider the "best." The process for selecting the "best" model in this study was done by comparing the best one-variable model (i.e., the model with the highest R^2) with the best two-variable model which, in turn, is compared with the best three-variable model and so on. This process is repeated until the difference between adjacent best models (in terms of R^2) does not exceed 1%. The model chosen is the smaller (in number of predictor variables) of the adjacent models.

Mallow's C(p) Procedure: In SAS, the PROC REG SELECTION = C(p) procedure uses an approach similar to the R-squared procedure for selecting the "best" model, with the exception that it uses Mallow's C(p) statistic as the criterion for model selection. It identifies the "best" model as the model with the lowest C(p) and prints various

models in ascending order according to the size of $C(p)$. The task for the researcher is to decide whether to accept the default (i.e., what the computer identified as the "best") or some other model with perhaps slightly larger $C(p)$ but clearly as (or more) meaningful yet with little difference in R^2 . However, in using this process, the $C(p)$ associated with the selected model must not be greater than the number of parameters by 1. For example, if the "best" model selected has five predictor variables, then the $C(p)$ should not be greater than 6.

The tables for the best prediction model of each cluster that was considered gave the standardized coefficient (b), multiple R-squared (R^2), and the F-statistics. For the $C(p)$ procedure, Mallows' $C(p)$ is also given. For the full model, significant β weights ($p < .05$) were marked with asterisks.

The criteria in selecting the best prediction model were as follows: (1) the multiple correlation was to be significant, with $p < .05$; (2) the multiple R-squared was to be $> .1000$; (3) the multiple R-squared was at least 1% better than other models; and (4) the selected model must be incorporated with hypothesized variables.

There could be several reasons why the regression models differ from the hypothesized models: (1) The hypothesized model may misinterpret the theory; (2) a certain personality factor may be eliminated because some other correlated factor is a superior predictor; (3) the theory was

based on a distribution of scores from an average North American sample, whereas relatively high (low) scores for this sample may be different from high (low) scores from the seminarian or Filipino college sample; (4) the model works with either the seminarian sample or the Filipino sample, because of cultural differences; (5) the subjects are from students, and diverse findings may be elicited from an all lay, mature sample.

The correlation matrices (Appendices C) show that all of the 16 personality factors are not highly correlated with each other (the highest for the seminarians--H and F (.54) and for the Filipinos--Q₄ and O (.37)). Thus, it is unlikely that the elimination of a factor from the hypothesized model occurred because it is highly correlated with a retained factor.

Hypothesis 1

Hypothesis 1 states that among the seminarian respondents there is no significant multiple correlation between each of the spiritual gifts clusters and personality factors indicated by the 16 PF.

Teacher Cluster

Table 10 indicates the best prediction models based on six multiple regression procedures for the teacher cluster as the dependent variable for the seminarian sample. The full model can account for 17.1% of the variance; 15.8% is accounted for by the "best" model (six variables) produced by

TABLE 10

BEST PREDICTION MODEL WITH THE TEACHER
CLUSTER AS DEPENDENT VARIABLE
FOR THE SEMINARIAN SAMPLE

Factors	Full Model	Stepwise	Forward	Backward	Mallow's C(p)	R-squared
A	-.009					
B	-.006					
C	.048				.079	
E	.132*				.104	
F	.028					
G	.048					
H	.195*	.314(1)	.314(1)	.314	.261	.314
I	.078				.077	
L	.019					
M	.194*	.196(2)	.196(2)	.196	.182	.196
N	.129*	.112(3)	.112(3)	.112	.134	.112
O	-.025					
Q ₁	-.048					
Q ₂	-.064					
Q ₃	.023					
Q ₄	-.051					
R ²	.171	.142	.142	.142	.158	.142
C _p					3.561	
F value	5.41	5.76	5.76	23.81	13.44	23.81

Numbers in () indicate the order of step.

Mallow's C(p) method; and 14.2% by the three predictor model identified by stepwise, forward, backward, and R-squared procedures. An examination of the various models suggests a three-predictor model is viable. Factors H+, M+, and N+ have high and stable β s. Thus, the model selected by stepwise, forward, backward, and R-squared procedures is chosen.

A person high in H factor is not usually intimidated dealing with people. He/she is friendly, active, responsive, and carefree. These are ideal qualities for a teacher.

A high factor M score includes imaginative creativity, an attractive quality for teachers. Birkin (1969) found that creativity in students may be fostered by a teacher with high M and N factors. The Handbook for the 16 PF (Cattell et al., 1970) reported that studies on high-school teachers and university professors revealed M factors and N factors were high for those teaching professions (p. 183). The teacher cluster would include conducting classes and seminars, writing articles and lessons, preparing curriculum, and editing books. The high N factor, with its efficiency and polish, is desirable for such activities.

The regression model has only three of the five hypothesized personality factors. Factors A+ (warm) and Q₃+ (self-control) are missing. Though it is an unusual finding, a possible explanation is that the seminarians who would teach the exact Bible truth are not necessarily warm. The seminarian is considered to be a "self-controlled" group. It may be that those who score low on Q₃ did not score high on the teacher cluster.

Shepherd/Evangelist Cluster

Table 11 shows the best prediction model with the shepherd/evangelist cluster as the dependent variable for the seminarian sample. The full model can account for 15.6% of the variance; 13.9% is accounted for by the "best" model (five variables) produced by Mallow's C(p) method; and 13.3% by the four predictor variables identified by stepwise,

TABLE 11

BEST PREDICTION MODEL WITH THE SHEPHERD/EVANGELIST
CLUSTER AS DEPENDENT VARIABLE
FOR THE SEMINARIAN SAMPLE

Factors	Full Model	Stepwise	Forward	Backward	Mallow's C(p)	R-squared
A	.036					
B	-.136*	-.154(3)	-.154(3)	-.154	-.150	-.154
C	-.037					
E	-.086					
F	-.029					
G	.084				.086	
H	.228*	.222(1)	.222(1)	.222	.222	.222
I	.006					
L	.057					
M	.047					
N	.032					
O	-.054					
Q ₁	-.116*	-.137(4)	-.137(4)	-.137	-.140	-.137
Q ₂	-.059					
Q ₃	.099	.153(2)	.153(2)	.153	.118	.153
Q ₄	-.019					
R ²	.156	.133	.133	.133	.139	.133
C _p					3.788	
F value	4.89	16.59	16.59	16.59	13.95	16.59

Numbers in () indicate the order of step.

forward, backward, and R-squared procedures. An examination of the various models suggests a five-predictor model is viable. Factors H+, Q₃+, B-, Q₁-, and G+ have high and stable βs. Thus, the model selected by Mallow's C(p) procedure is chosen.

Factor H+ indicates bold, venturesome, active, and meeting people easily. It is ideal for those with high H to be moderated with Q₃+ (self-control). A higher G factor score describes a conscientious, persevering, emotionally

disciplined person who is concerned about moral standards and rules. Along with low Q₁ factor's conservatism and traditionalism, it is difficult for such a person to yield to liberal or radical ideas. These are valued qualities for the shepherds in the evangelical parochial context.

Factor B- (more concrete than abstract thinking) for the shepherd/evangelist cluster may seem strange. However, a person with B- would handle well regular and routine work rather than abstract ideas, and such may well be the lot of the regular shepherd/evangelist. Another possible explanation may be that most of the seminarians scored high on factor B as Table 8 shows, but the ones who scored high on the shepherd/evangelist cluster tended to score lower on factor B. Factors A+ and F- are missing in this regression model, whereas the Filipino model for shepherd/evangelist cluster includes A+ and F-, which may suggest that warmth and seriousness are more predictable for the shepherd/evangelist ministries in the Oriental culture.

Supporter Cluster

Table 12 shows the best prediction model with the supporter cluster as the dependent variable for the seminarian sample. The full model can account for 15.5% of the variance; 14.5% is accounted for by the "best" model (seven variables) produced by Mallow's C(p) method; 12.1% by four variables by R-squared procedure; and 13.8% by the six predictor variables identified by stepwise, forward, and

TABLE 12

BEST PREDICTION MODEL WITH THE SUPPORTER
CLUSTER AS DEPENDENT VARIABLE
FOR THE SEMINARIAN SAMPLE

Factors	Full Model	Stepwise	Forward	Backward	Mallow's C(p)	R-squared
A	.091				.083	
B	-.094	-.103(3)	-.103(3)	-.103	-.099	-.118
C	-.023					
E	-.067					
F	-.027					
G	.124*	.136(2)	.136(2)	.136	.134	.182
H	.134*	.157(4)	.157(4)	.157	.130	.119
I	-.023					
L	.032					
M	.007					
N	-.091					
O	.121*	.137(5)	.137(5)	.137	.138	
Q ₁	-.009					
Q ₂	-.033					
Q ₃	.129*	.111(6)	.111(6)	.111	.115	
Q ₄	-.218*	-.224(1)	-.224(1)	-.224	-.225	-.197
R ²	.155	.138	.138	.138	.145	.121
C _p					4.000	
F value	4.81	11.52	11.52	11.52	10.37	14.88

Numbers in () indicate the order of step.

backward procedures. An examination of the various models suggests a six-predictor model is viable. Factors Q₄-, H+, O+, Q₃+, G+, and B- have high and stable β s. Thus, the model selected by stepwise, forward, and backward procedures is chosen. This model is chosen because it more closely matches the hypothesized model even though it does not explain an additional 1% per variable.

When Q₄ factor is low, a person is typically relaxed, composed, and rarely frustrated. These traits would be

helpful for supporting ministries in the church which include such activities as collecting food for the needy, fixing a meal for a patient, chopping wood for an elderly person, assisting the handicapped, and visiting those in hospital and prison. Other activities such as putting up seminar posters, caring for church grounds, opening the church for services, and serving in the kitchen need high G factor's qualities such as being persistent, responsible, disciplined, ordered, and having a strong sense of duty.

Someone with low B factor is "able to work better with simple things than with complex ideas," and handle routine work (Chalmers & Chalmers, 1979, p. 38), tends to work with his/her hands. According to the Handbook for the 16 PF, high H and Q₃ are associated with success in organized activities (Cattell et al., 1970, pp. 92, 107), which is related to the supporting function in the church.

The O⁺ factor and the Q₄⁻ factor are essentially opposite, because O⁺ indicates apprehensive, worrying, and Q₄⁻ indicates relaxed and unfrustrated. However, O⁺ does not indicate "the individual's being irrationally worried, tense, irritable, anxious, and turmoil," as Q₄⁺ is described (Cattell et al., 1970, p. 108). Some of the characteristics of the high O factor are a strong sense of obligation and sensitivity to people's approval and disapproval, which match a supporter's characteristics. The hospitality, giving, and intercessory gifts of the supporter cluster need low Q₄ factor's relaxed, unfrustrated, composed attitudes, and these

traits suggest a healthy balance to the anxieties of high O.

The regression model has all six hypothesized personality factors.

Counselor Cluster

Table 13 shows the best prediction model with the counselor cluster as the dependent variable for the seminarian sample. The full model can account for 16.5% of the variance; 14.8% is accounted for by the "best" model (five variables) produced by Mallow's C(p) method; and 13.6%

TABLE 13
BEST PREDICTION MODEL WITH THE COUNSELOR
CLUSTER AS DEPENDENT VARIABLE
FOR THE SEMINARIAN SAMPLE

Factors	Full Model	Stepwise	Forward	Backward	Mallow's C(p)	R-squared
A	-.033					
B	.024					
C	.064					
E	.164*	.180(3)	.180(3)	.180	.169	.180
F	.032					
G	.007					
H	.164*	.175(1)	.175(1)	.175	.177	.175
I	.063					
L	.078					
M	.057					
N	.041					
O	-.008					
Q ₁	.071				.082	
Q ₂	.014					
Q ₃	.090				.090	
Q ₄	-.154*	-.191(2)	-.191(2)	-.191	-.167	-.191
R ²	.165	.136	.136	.136	.148	.136
C _p					3.403	
F value	5.18	22.66	22.66	22.66	14.99	22.66

Numbers in () indicate the order of step.

by the three predictor variables identified by stepwise, forward, backward, and R-squared procedures. An examination of the various models suggests a three-predictor model is viable. Factors H+, Q4-, and E+ have high and stable β s. Thus, the model selected by stepwise, forward, backward, and R-squared procedures is chosen.

The regression model has only one of the seven hypothesized personality factors. For non-professional Christian counselors who often deal with crises in the church as well as assist those with private struggles it may not be desirable to have H factor's boldness and E factor's dominance. However, H+ includes friendliness and responsibility that would be helpful for Christian counselors. Q4- factor's relaxed, unfrustrated, and composed drive would also be an advantage for Christian counselors. This working model is quite different from the hypothesized model which was based mainly on a model for professional employment counselors. It now seems probable that there are numerous differences between non-professional Christian counselors, and professional employment counselors.

Leader Cluster

Table 14 indicates the best prediction model for the leader cluster as the dependent variable for the seminarian sample. The full model can account for 27.8% of the variance; 26.7% is accounted for by the "best" model (eight variables) produced by Mallow's C(p) method; 26.2% by seven

TABLE 14

BEST PREDICTION MODEL WITH THE LEADER
CLUSTER AS DEPENDENT VARIABLE
FOR THE SEMINARIAN SAMPLE

Factors	Full Model	Stepwise	Forward	Backward	Mallow's C(p)	R-squared
A	.002					
B	-.091*			-.094	-.091	
C	.073					
E	.205*	.192(4)	.192(4)	.202	.181	.192
F	.005					
G	.163*	.166(2)	.166(2)	.166	.156	.166
H	.200*	.217(1)	.217(1)	.197	.198	.217
I	-.047					
L	.084				.076	
M	.122*			.094	.103	
N	.049					
O	-.150*	-.164(3)	-.164(3)	-.154	-.171	-.164
Q ₁	-.049					
Q ₂	.005					
Q ₃	.140*	.135(5)	.135(5)	.143	.153	.134
Q ₄	.029					
R ²	.278	.248	.248	.262	.267	.248
C _p					7.400	
F value	10.08	28.49	28.49	21.72	19.44	28.49

Numbers in () indicate the order of step.

variables by backward procedure; and 24.8% by the five predictor variables identified by stepwise, forward, and R-squared procedures. An examination of the various models suggests a five-predictor model is viable. Factors H+, G+, O-, E+ and Q₃+ have high and stable β s. Thus, the model selected by stepwise, forward, and R-squared procedures is chosen.

Cattell and Stice (1954) noted that the H+ person's boldness and sociability plus a high Q₃ score would be

predictive of a leader. A high H factor means bold, active, adventurous. Often these are also characteristics of leaders. The H+ person often results in a significantly greater probability of becoming a leader (Cattell & Stice, 1954). One of the gifts in the leader cluster is the gift of administration, and H factor is high in administrators (Cattell et al., 1970, p. 92).

Christian leadership, which involves such activities as taking the initiative in new outreach programs, sometimes demands boldness and ascendance--high E with high H. The Handbook for the 16 PF stated that factor E "is somewhat higher in established leaders than in followers," and "groups averaging high on E show more effective role interaction and democratic procedure" (Cattell et al., 1970, p. 86). A high G score also was evaluated as significantly related to leadership by the Handbook (p. 90). Christian leaders also need to be conscientious, persevering, and emotionally disciplined people who are concerned about moral standards and rules (G+); they also are self-controlled (Q₃+).

Serenity, an inner peace, and confidence are important in leaders and the leader cluster is correlated with a low O factor which indicates these traits. It is noteworthy that "high O factor is strongly weighted against successful leadership" (Cattell et al., 1970, p. 102).

When a leader is conscientious (G+), the O- traits such as inner peace, confidence, and self-assuredness would be justified. On the other hand, if one is expedient (G-)

and the factor O is low, one would have very little concern when God's rules were disregarded. Thus, it is important for a Christian leader to have both high G and low O traits.

This working model is identical with the hypothesized model for the leader cluster, indicating that church leadership somewhat reflects leadership in society at large.

In testing Hypothesis 1, each of the five spiritual gifts clusters was significantly correlated with personality factors indicated by the 16 PF. However, the regression models for some of clusters include only some of the factors that were predicted in hypothesized models.

Summary of Testing Hypothesis 1

Table 15 summarizes the best prediction personality factor models for the five spiritual gifts clusters among the seminarian sample.

TABLE 15

BEST PREDICTION PERSONALITY FACTORS FOR THE SPIRITUAL
GIFTS CLUSTERS AMONG THE SEMINARIAN SAMPLE

=====	
Gifts Clusters	Predicting Personality Factors
<hr/>	
Teacher	H+ (Sociability) M+ (Imaginative, Creative) N+ (Insightful, Shrewd)
<hr/>	
Shepherd/ Evangelist	H+ (Bold, Venturesome, Responsive) Q ₃ +(Self-control) B- (Concrete thinking) Q ₁ -(Conservative) G+ (Conscientious, Persevering)
<hr/>	
Supporter	Q ₄ -(Relaxed, Composed, Unfrustrated) G+ (Conscientious) H+ (Bold, Uninhibited) B- (Concrete-thinking)
<hr/>	
Counselor	H+ (Socially bold) Q ₄ -(Relaxed, Unfrustrated) E+ (Assertive)
<hr/>	
Leader	H+ (Venturesome, Sociability) E+ (Dominant, Competitive, Bossy) G+ (Conscientious, Rule-bound, Staid) O- (Inner peace, Confident, Self-assured) Q ₃ +(Self-control)
<hr/>	

Hypothesis 2

Hypothesis 2 states that among the Filipino respondents, there is no significant multiple correlation between each of the spiritual gifts clusters and personality factors indicated by the 16 PF.

Teacher Cluster

Table 16 indicates the best prediction model for the teacher cluster as the dependent variable for the Filipino sample. The full model can account for 11.6% of the variance; and the four predictor variables identified by stepwise, forward, backward, Mallow's C(p), and R-squared account for 10.3% of the variance. An examination of the various models suggests a four-predictor model is viable. Factors H+, Q₃+, F-, and A+ have high and stable β s. Thus, the model selected by stepwise, forward, backward, Mallow's C(p), and R-squared procedures is chosen.

An individual high in factors H and A likes people. The friendly and active personality of the H+ person is natural for teachers, and the warmhearted, trustful, and attentive characteristics of A+ person are also typical for successful teachers. These qualities are counter balanced with the seriousness and self-control that F- and Q₃+ indicate.

However, this working model does not match with the hypothesized model, mainly the serious and sober traits that F- indicates. It may well be that Christian Filipino

TABLE 16

BEST PREDICTION MODEL WITH THE TEACHER
CLUSTER AS DEPENDENT VARIABLE
FOR THE FILIPINO SAMPLE

Factors	Full Model	Stepwise	Forward	Backward	Mallow's C(p)	R-squared
A	.102*	.099(4)	.099(4)	.099	.099	.099
B	-.029					
C	.014					
E	.030					
F	-.129*	-.118(3)	-.118(3)	-.118	-.118	-.118
G	.004					
H	.237*	.276(1)	.276(1)	.276	.276	.276
I	-.065					
L	-.038					
M	.039					
N	-.036					
O	.003					
Q ₁	-.006					
Q ₂	-.063					
Q ₃	.125*	.119(2)	.119(2)	.119	.119	.119
Q ₄	.020					
R ²	.116	.103	.103	.103	.103	.103
C _p					-1.624	
F value	3.12	11.34	11.34	11.34	11.34	11.34

Numbers in () indicate the order of step.

teachers have a sense of the seriousness of the implications of the gospel.

Factor M+ and N+ are missing, which may suggest that culturally imagination and efficiency do not fit well with the typical teacher profile in the Oriental culture.

Shepherd/Evangelist Cluster

Table 17 shows the best prediction model with the shepherd/evangelist cluster as the dependent variable for the Filipino sample. The full model can account for 14.4% of the

variance; 13.3% is accounted for by the "best" model (five variables) produced by Mallow's C(p) method; and 12.5% by the four predictor variables identified by stepwise, forward, backward, and R-squared. An examination of the various models suggests a five-predictor model is viable. Factors H+, Q₃+, F-, G+, and A+ have high and stable β s. Thus, the model selected by Mallow's C(p) procedure is chosen.

As already stated, venturesome, bold (H+), warmhearted (A+) and persistent (Q₃+) characteristics go well

TABLE 17
BEST PREDICTION MODEL WITH THE SHEPHERD/EVANGELIST
CLUSTER AS DEPENDENT VARIABLE
FOR THE FILIPINO SAMPLE

Factors	Full Model	Stepwise	Forward	Backward	Mallow's C(p)	R-squared
A	.082				.092	
B	.013					
C	.024					
E	.034					
F	-.142*	-.132(3)	-.132(3)	-.132	-.138	-.132
G	.096	.117(4)	.117(4)	.117	.113	.117
H	.255*	.298(1)	.298(1)	.298	.276	.298
I	-.009					
L	-.027					
M	-.053					
N	.005					
O	-.010					
Q ₁	-.035					
Q ₂	-.070					
Q ₃	.131*	.129(2)	.129(2)	.129	.143	.129
Q ₄	-.015					
R ²	.144	.125	.125	.125	.133	.125
C _p					-0.205	
F value	4.01	14.11	14.11	14.11	12.05	14.11

Numbers in () indicate the order of step.

with the shepherd/evangelist functions. An F- person's traits (sober, prudent, and serious) and a G+ person's qualities (conscientious, moralistic, and rule-bound) are also predictable characteristics of shepherd/ evangelists. However, the regression model has only five of the six hypothesized personality factors. Q₁- (conservatism) is missing. A possible explanation could be that the Filipinos are normally conservative, but those who scored low on Q₁ (extremely conservative) did not score high on the shepherd/evangelist cluster. Conservatism in pastoral ministry may be valuable for the North American, but not so with the Filipinos who belong to conservative Oriental culture.

Supporter Cluster

Table 18 shows the best prediction model with the supporter cluster as the dependent variable for the Filipino sample. The full model can account for 11.2% of the variance; and the two-predictor variables identified by stepwise, forward, backward, Mallow's C(p), and R-squared account for 9.6% of the variance. An examination of the various models suggests a two predictor model is viable. Factors Q₃+ and H+ have high and stable β s. Thus, the model selected by stepwise, forward, backward, Mallow's C(p), and R-squared procedures is chosen even though this model accounts for slightly less than 10% of the variance.

According to the Handbook for the 16 PF, high H and

TABLE 18
BEST PREDICTION MODEL WITH THE SUPPORTER
CLUSTER AS DEPENDENT VARIABLE
FOR THE FILIPINO SAMPLE

Factors	Full Model	Stepwise	Forward	Backward	Mallow's C(p)	R-squared
A	.036					
B	-.067					
C	.048					
E	-.026					
F	-.037					
G	.062					
H	.175*	.165(2)	.165(2)	.165	.165	.165
I	-.010					
L	-.021					
M	-.021					
N	-.065					
O	-.024					
Q ₁	-.018					
Q ₂	.039					
Q ₃	.219*	.240(1)	.240(1)	.240	.240	.240
Q ₄	.025					
R ²	.112	.096	.096	.096	.096	.096
C _p					-3.816	
F value	3.02	20.90	20.90	20.90	20.90	20.90

Numbers in () indicate the order of step.

Q₃ are associated with success in organized activities (Cattell et al., 1970, pp. 92, 107), which is related to the supporting function in the church. This working model includes factors of the hypothesized model for the supporter cluster. However, the regression model has only two of the six hypothesized personality factors. A possible explanation may be cultural, and the status of the sample. The hypothesized model may hold true for mature Christians in the Philippines.

Counselor Cluster

Table 19 shows the best prediction model with the counselor cluster as the dependent variable for the Filipino sample. The full model can account for 8.5% of the variance; 6.1% is accounted for by the "best" model (three variables) produced by Mallow's C(p) method; and 5.6% by the two predictor variables identified by stepwise, forward, backward, and R-squared procedures.

However, this was not a practical model to use

TABLE 19
BEST PREDICTION MODEL WITH THE COUNSELOR
CLUSTER AS DEPENDENT VARIABLE
FOR THE FILIPINO SAMPLE

Factors	Full Model	Stepwise	Forward	Backward	Mallow's C(p)	R-squared
A	.078					
B	.022					
C	.083				.074	
E	-.026					
F	-.051					
G	-.005					
H	.137*	.160(1)	.160(1)	.160	.150	.160
I	-.057					
L	.012					
M	.050					
N	-.053					
O	-.052					
Q ₁	.027					
Q ₂	-.007					
Q ₃	.159*	.154(2)	.154(2)	.154	.138	.154
Q ₄	.106					
R ²	.085	.056	.056	.056	.061	.056
C _p					0.854	
F value	2.21	11.75	11.75	11.75	8.58	11.75

Numbers in () indicate the order of step.

because the proportion of variance predicted was too small. Therefore, no detailed results are reported.

It is something of a mystery that no model could be found for a counselor. It would seem that counseling/encouraging/mentoring would be a clearly identifiable element in every culture. It is a normal part of parenting, leading, shepherding, and teaching. Thus, any hypothesis to explain this finding seems inadequate. But one comment is ventured: all the subjects were young people in college, and their reverence for those older than themselves, the ones who are the counselors in their lives, may have been a factor in this unusual finding.

Leader Cluster

Table 20 indicates the best prediction model for the leader cluster as the dependent variable for the Filipino sample. The full model can account for 15.1% of the variance; 13.0% is accounted for by the "best" model (three variables) produced by Mallow's $C(p)$ method; and 12.3% by the two-predictor variables identified by stepwise, forward, backward, and R-squared procedures. An examination of the various models suggests a three-predictor model is viable. Factors Q_3+ , $H+$, and $O-$ have high and stable β s. Thus, the model selected by Mallow's $C(p)$ procedure is chosen. This model includes some factors common with the hypothesized model for the leader cluster.

Someone high on the leader and shepherd/evangelist

TABLE 20
BEST PREDICTION MODEL WITH THE LEADER
CLUSTER AS DEPENDENT VARIABLE
FOR THE FILIPINO SAMPLE

Factors	Full Model	Stepwise	Forward	Backward	Mallow's C(p)	R-squared
A	-.014					
B	.035					
C	.023					
E	-.057					
F	.026					
G	.084					
H	.209*	.214(2)	.214(2)	.214	.194	.214
I	-.042					
L	-.050					
M	.029					
N	-.039					
O	-.039				-.088	
Q ₁	.021					
Q ₂	.055					
Q ₃	.194*	.250(1)	.250(1)	.250	.232	.250
Q ₄	-.044					
R ²	.151	.123	.123	.123	.130	.123
C _p					0.697	
F value	4.26	27.75	27.75	27.75	19.65	27.75

Numbers in () indicate the order of step.

clusters is high on H and Q₃ factors. High H people are adventurous and active, and show little inhibition from environmental threats. They usually show boldness in social, emotional, and physical danger situations. Boldness and activeness, typical of a higher H score, are well suited to leadership. It is consistent with Cattell and Stice's (1954) findings that high H individuals are frequently chosen as leaders.

The leader cluster is predicted by the Q₃+ factor

also. The Handbook for the 16 PF (Cattell et al., 1970) states that the Q₃+ person exercises strong self-control, persistence, consideration of others, and is respectful of social expectations. According to Cattell and Stice (1954), someone high on a Q₃ score could well be chosen as a leader, but even more so those who are routinely effective rather than merely popular. They also have clear goals and plans for their lives, and others tend to have confidence in them.

A person with Q₃+ brings his/her emotions and general behavior under control and Christian leaders' self-control "is essential for the development of a consistent, predictable character approved by society and God" (Chalmers & Chalmers, 1979, p. 57). The O- traits such as inner peace, confidence, and self-assuredness would bring healthy balance to H+ and Q₃+

However, the regression model has only three of the five hypothesized personality factors. Again, it is possible that culture and the student sample may account for the divergence.

In testing Hypothesis 2, four of the five spiritual gifts clusters were significantly correlated with personality factors indicated by the 16 PF. However, the working predictive models for each cluster includes only some of the factors that were predicted in hypothesized models.

Summary of Testing Hypothesis 2

Tables 21 summarizes the best prediction personality

TABLE 21
BEST PREDICTION PERSONALITY FACTORS FOR THE SPIRITUAL
GIFTS CLUSTERS AMONG THE FILIPINO SAMPLE

Gifts Clusters	Predicting Personality Factors
Teacher	H+ (Sociability) Q ₃ +(self-control) F- (Seriousness) A+ (Warmhearted)
Shepherd/ Evangelist	H+ (Bold, Venturesome) F- (Sober, Seriousness) Q ₃ +(Self-control) G+ (Conscientious, Moralistic) A+ (Warmhearted)
Supporter	Q ₃ +(Self-control) H+ (Can take stress)
Leader	Q ₃ +(Self-control) H+ (Bold, Sociability) O- (Inner Peace, Confidence)

factor models for the spiritual gifts clusters among the Filipino sample.

Summary of Testing Hypotheses

Table 22 shows the comparison of the personality factors that best predict the spiritual gifts clusters for the seminarians and the Filipinos.

In obtaining the best prediction models for the spiritual gifts clusters, factor H+ is common to all of the spiritual gifts clusters for the seminarian sample, and H+ and Q3+ are common to all of the spiritual gifts clusters for the Filipino sample--except in the case of the counselor cluster where there is no practical model for the Filipino sample.

These findings indicate that all of the spiritual gifts that are categorized under the five clusters tend to be

TABLE 22
COMPARISON OF PERSONALITY FACTORS
THAT BEST PREDICT SPIRITUAL
GIFTS CLUSTERS

Clusters	Seminarians	Filipinos
Teacher	H+, M+, N+	H+, Q3+, F-, A+
Shepherd	H+, B-, Q3+, Q1-, G+	H+, F-, Q3+, G+, A+
Supporter	Q4-, G+, H+, B-, O+, Q3+	Q3+, H+
Counselor	Q4-, E+, H+	
Leader	H+, E+, G+, O-, Q3+	Q3+, H+, O-

related to bold, venturesome, active, responsive, friendly, and people-loving orientations, which are the main characteristics of a high H factor.

Factor Q₃+ is especially common among the Filipino sample, which implies such characteristics as self-control, persistence, consideration of others, and respect of social expectations.

Other than the commonality of H+ and Q₃+ factors for both of the samples, the results are quite different in the two samples under study. For the seminarian sample, factors M+ and N+ are peculiar to the teacher cluster, which suggests that teaching gifts for seminarians tend to be characterized as imaginative and efficient, whereas the factors F- and A+ in the Filipino' teaching gifts suggests a more warm and reflective notion. One reason for this observation may be that the seminarians are predominantly Western (more than 70% are North Americans) where efficiency is emphasized in teaching, whereas the Filipinos--Orientals--place a high value on the relationship between teacher and pupil.

Factors B- and Q₁- are observed for the seminarian's shepherd/evangelist cluster. Conservatism (Q₁-) is anticipated for the shepherd/evangelist cluster, but B- (concrete rather than abstract thinking) is somewhat unusual. The Filipino model for shepherd/evangelist cluster includes A+ and F-, which may suggest that warmth and seriousness are more predictable for the shepherd/evangelist ministries in the Oriental culture.

The prediction model for the supporter cluster among the seminarians is identical with the hypothesized model, whereas the Filipinos' have only two predictors. A possible reason may be the cultural difference. However, it may be applicable with mature church members in the Philippines. Any other attempt to explain the reason at this point seems inadequate.

For the counselor cluster, the seminarian model is quite different with the hypothesized model, and the Filipino model is not practical. A possible reason for the seminarian result may be that a Christian counselor is only tangential related to a professional employment counselor. For the Filipino sample, where Oriental students' reverence to those older than themselves may have been a factor in this unusual finding.

Factors H+, Q₃+ and O- are common with the leader cluster among two samples, indicating boldness, self-control, and confidence--factors typical in church leadership and leadership in society at large.

Finally, the fact that the best prediction models of the spiritual gifts clusters are basically different for the two samples suggests that predicting one's potential giftedness through exploring personality profiles must be normed for each cultural group where there are significant differences in the way ministry is implemented. For the seminarian sample, though it is true that the sample is a multi-racial group, in a broad sense they belong to one basic

culture (which does not deny the presence of important racial subcultures), in that more than 70% of them are North American. Further discriminating demographic information was not available.

Chapter Summary

This chapter has described the subjects used in the study and reported the testing of the hypotheses. The two hypotheses formulated for this study were tested by means of various procedures of multiple regression analyses, and regression models were considered that predicted more than 10% of the variance.

For the seminarian sample the regression models for spiritual gifts clusters were identical with hypothesized models in two cases, similar in two cases, and different in one case. For the Filipino sample, all are different except one similar case. Possible reasons for these observations were discussed for each model.

Table 22 summarizes a comparison of personality factors that best predicts spiritual gifts clusters between the two samples.

In answering the research question of suggesting personality factors that are related with spiritual gifts clusters based on possible correlation, it would appear that following factors would be useful. They are listed in descending order of weight for each regression model.

For the North American sample:

Teacher--H+ (.314), M+ (.196), N+ (.112);

Shepherd/Evangelist--H+ (.222), B- (.150), Q₁-
(.140), Q₃+ (.118), G+ (.086);

Supporter--Q₄- (.224), H+ (.157), O+ (.137), G+
(.136), Q₃+ (.111), B- (.103);

Counselor--Q₄- (.191), E+ (.180), H+ (.175); and

Leader--H+ (.217), E+ (.192), G+ (.166), O- (.164),
Q₃+ (.135).

For the Filipino sample:

Teacher--H+ (.276), Q₃+ (.119), F- (.118), A+ (.099);

Shepherd/evangelist--H+ (.276), Q₃+ (.143), F-
(.138), G+ (.113), A+ (.092);

Supporter-- Q₃+ (.240), H+ (.165); and

Leader--Q₃+ (.250), H+ (.214), O- (.088).

CHAPTER V

SUMMARIES, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents summaries of chapters 1 through 4, with conclusions, implications, and recommendations drawn from the findings. This study was concerned with the possible correlation between 16 personality factors and five spiritual gifts clusters.

Summaries

The purpose of the study, the review of related literature and research, the methodology, and the findings are briefly summarized below.

The Purpose

Research had been undertaken to investigate the possible correlation between temperaments and spiritual gifts (Joachim, 1984) and psychological types and spiritual gifts (Phoon, 1986). These studies found that there are significant correlations between temperaments and spiritual gifts and between psychological types and spiritual gifts. However, far fewer correlations than anticipated were identified, and it was hypothesized that the instruments utilized in these studies may not have been adequate for the research questions.

A preliminary study (Naden et al., 1992) examined the possible correlation between the personality factors of the 16 PF and spiritual gifts clusters of the NSGI and hypothesized five predictive models. The strength of the correlations suggested that a full-scale study was warranted. The purpose of this present study was to explore hypothetical predictive models regarding the correlation that exists between the personality factors and five spiritual gifts clusters on the basis of two empirically developed instruments, the Sixteen Personality Factor Questionnaire and the New Spiritual Gifts Inventory, in two contrasting cultures.

Review of Related Literature and Research

The review of literature was divided into two sections. The first dealt with spiritual gifts; and the second, with personality factors.

Among the several Greek words that are translated "gift" in the New Testament, charisma and pneumatikos are prominent. Charisma, which means "gift of grace," uniquely expresses Paul's theology of spiritual gifts, and pneumatikos, which means "gift," and often translated as "spiritual" gift, connotes the idea of sovereign distribution. Other words such as diakonia, energema, phanerosis, and domata, along with charisma and pneumatikos, reflect the experience Paul had with spiritual gifts in his own life.

Among them, the three words that are used in

1 Cor 12:4-6 (charisma, diakonai, and energemata) express the nature and purpose of spiritual gifts--the term charismata denotes the source of the gifts as divine charis; the term diakonai means "eager readiness to serve," which implies a purpose to serve others, not the recipient; and the term energemata means functional "outworkings," to produce results. In his use of these three terms, Paul implies the origin of the gifts, the way in which they are experienced in the church, and the results of ministry using spiritual gifts.

Two positions regarding the difference between spiritual gifts and natural talents are noteworthy: one is that spiritual gifts are not related with talents, and the other is that they are virtually the same. Those who distinguish the two believe that spiritual gifts are supernatural, whereas talents are innate in every human at birth. Those who view the conversion experience as the act of giving one's natural talents to God and receiving them back as spiritual gifts are comfortable with the idea of spiritual gifts and personality being intimately correlated.

No consensus has been reached concerning a classification of spiritual gifts, but an attempt has been made to establish the main areas of giftedness with the goal of enabling individuals to identify and experiment with a wide range of ministries in the contemporary setting. Several researchers have developed gift inventories to help Christians identify individual giftedness, but only one

researcher has published validity and reliability data.

It was Cattell who viewed personality as the predictor of behavior and developed questionnaires to study individual personalities by factor analysis. To reveal the underlying structure of personality, Cattell identified source traits and labeled them as factors A-Q₄. These 16 basic traits are explored in the Sixteen Personality Factor Questionnaire.

The 16 PF has been used widely in research regarding the correlation between personality patterns and different vocations, with the result that different occupational groups are now characterized by specific personality profiles. Religious professions (e.g., priests) have been included in the identification of personality profiles. Some studies with the 16 PF have revealed that personalities are significantly correlated with different approaches to ministry by clergy.

Methodology

A correlational research design was used to determine the relationship between 16 personality factors and five spiritual gifts clusters. The instruments used were:

1. The Sixteen Personality Factor Questionnaire (16 PF) by Cattell, Saunders, and Stice, which has 187 questions --each offers a trinomial choice
2. The New Spiritual Gifts Inventory (NSGI) by Naden, which has 20 questions--each offers a choice on a Likert-style 5-point continuum between false and true.

These two instruments were used because validity and

reliability data have been published that indicate their appropriateness for empirical research.

Eight hundred and forty subjects were included in this study which was comprised of students and their spouses of the Seventh-day Adventist Theological Seminary, Berrien Springs, Michigan, and undergraduate students of Philippine Union College, Silang, Philippines. Four hundred and thirty-seven sets of instruments were collected over 4 years for the seminarian sample, and 410 sets were administered to students of Philippine Union College. Four hundred and three sets were returned, and of these, 399 (97%) were usable.

Two null hypotheses were formulated to be tested statistically. The two hypotheses were tested with six statistical procedures of multiple regression analyses. For each of the hypotheses, only those with a significance level of $p < .05$ and multiple R-squared of $> .1000$ were considered.

Findings of the Study

For Hypotheses 1 and 2, Table 22 (p. 108) presents an overview of the results.

Hypothesis 1

Among the seminarian respondents, there is no significant multiple correlation between each of the spiritual gifts clusters and personality factors indicated by the 16 PF.

For the seminarian sample, someone high in factors H (friendly, responsive), M (imaginative), and N (shrewd,

efficient) was found to have the teacher cluster. Someone high in factors H (bold, venturesome, uninhibited), Q₃ (self-control), and G (conscientious), and low in factors B (concrete-thinking) and Q₁ (conservative) was found to have the shepherd/evangelist cluster. Someone high in factors G (persistent, disciplined, ordered), H (active, carefree), O (apprehensive), and Q₃ (self-control), and low in factors B (concrete-thinking) and Q₄ (relaxed, composed, unfrustrated) was found to have the supporter cluster. Someone high in factors H (can take stress) and E (ascendance), and low in factor Q₄ (relaxed, composed, unfrustrated) was found to have the counselor cluster. Someone high in factors H (toughness, sociability), G (conscientious), E (dominant), and Q₃ (socially precise), and low in factor O (inner peace) was found to have the leader cluster.

Table 15 (p. 97) summarizes the results for this hypothesis.

Hypothesis 2

Among the Filipino respondents, there is no significant multiple correlation between each of the spiritual gifts clusters and personality factors indicated by the 16 PF.

Someone high in factors H (bold, venturesome, active), Q₃ (exacting will power), and A (warm), and low in factor F (sober, serious) was found to have the teacher cluster. Someone high in factors H (bold, venturesome, active), Q₃ (exacting will power), G (conforming, staid), and

A (warm), and low in factor F (sober) was found to have the shepherd/evangelist cluster. Someone high in factors Q₃ (controlled) and H (active, carefree) was found to have the supporter cluster. Someone high in factors H (bold, sociability) and Q₃ (socially precise), and low in factor O (inner peace) was found to have the leader cluster.

The regression model for the counselor cluster was not practical, because the proportion of variance explained was too small.

Table 21 (p. 107) summarizes the results for this hypothesis.

Conclusions

Observations and discussions on the four hypotheses led to the following conclusions:

It was found that the regression models included personality factors hypothesized for each of the spiritual gifts clusters that were investigated.

For the seminarian sample the regression models for spiritual gifts clusters were identical with hypothesized models in two cases, similar in two cases, and different in one case. For the Filipino sample, all are different except one similar case.

In obtaining the best prediction models for the spiritual gifts clusters, factor H+ is common to all of the spiritual gifts clusters for the seminarian sample, and H+ and Q₃+ are common to all of the spiritual gifts clusters for

the Filipino sample--except in the case of the counselor cluster where there is no practical model for the Filipino sample.

These findings indicate that all of the spiritual gifts that are categorized under the five clusters tend to be related to bold, venturesome, active, responsive, friendly, and people-loving orientations, which are the main characteristics of a high H factor.

Factor Q₃+ is especially common among the Filipino sample, which implies such characteristics as self-control, persistence, consideration of others, and respect of social expectations.

Other than the commonality of H+ and Q₃+ factors for both of the samples, the results are quite different in the two samples under study. For the seminarian sample, factors M+ and N+ are peculiar to the teacher cluster, which suggests that teaching gifts for seminarians tend to be characterized as imaginative and efficient, whereas the factors F- and A+ in the Filipino' teaching gifts suggests a more warm and reflective notion. One reason for this observation may be that the seminarians are predominantly Western (more than 70% are North Americans) where efficiency is emphasized in teaching, whereas the Filipinos--Orientals--place a high value on the relationship between teacher and pupil.

Factors B- and Q₁- are observed for the seminarian's shepherd/evangelist cluster. Conservatism (Q₁-) is anticipated for the shepherd/evangelist cluster, but B-

(concrete rather than abstract thinking) is somewhat unusual. The Filipino model for shepherd/evangelist cluster includes A+ and F-, which may suggest that warmth and seriousness are more predictable for the shepherd/evangelist ministries in the Oriental culture.

The prediction model for the supporter cluster among the seminarians is identical with the hypothesized model, whereas the Filipinos' have only two predictors. A possible reason may be the cultural difference. However, it may be applicable with mature church members in the Philippines. Any other attempt to explain the reason at this point seems inadequate.

For the counselor cluster, the seminarian model is quite different with the hypothesized model, and the Filipino model is not practical. A possible reason for the seminarian result may be that a Christian counselor is only tangential related to a professional employment counselor. For the Filipino sample, where Oriental students' reverence to those older than themselves may have been a factor in this unusual finding.

Factors H+, Q₃+ and O- are common with the leader cluster among two samples, indicating boldness, self-control, and confidence--factors typical in church leadership and leadership in society at large.

In answering the research question of suggesting personality factors that are related with spiritual gifts clusters based on possible correlation, it would appear that

following factors would be useful. They are listed in descending order of weight for each regression model.

For the North American sample:

Teacher--H+ (.314), M+ (.196), N+ (.112);

Shepherd/Evangelist--H+ (.222), B- (.150), Q₁- (.140), Q₃+ (.118), G+ (.086);

Supporter--Q₄- (.224), H+ (.157), O+ (.137), G+ (.136), Q₃+ (.111), B- (.103);

Counselor--Q₄- (.191), E+ (.180), H+ (.175); and

Leader--H+ (.217), E+ (.192), G+ (.166), O- (.164), Q₃+ (.135).

For the Filipino sample:

Teacher--H+ (.276), Q₃+ (.119), F- (.118), A+ (.099);

Shepherd/evangelist--H+ (.276), Q₃+ (.143), F- (.138), G+ (.113), A+ (.092);

Supporter-- Q₃+ (.240), H+ (.165); and

Leader--Q₃+ (.250), H+ (.214), O- (.088).

Implications

1. Either the Sixteen Personality Factor Questionnaire (Cattell et al., 1949) and/or the New Spiritual Gifts Inventory (Naden, 1990b) can be used in the selection of prospective workers for different aspects of ministry in Christian organizations.

2. The Sixteen Personality Factor Questionnaire (16 PF), or another such instrument if/when it were available, may be used to identify one's personality profile and then

predict probable giftedness and fitness for certain ministries. This is especially true with women and minorities who may not have had the opportunity to attempt a wide range of church ministries.

3. Two possible explanations are offered for the correlation between personality factors and giftedness:

a. For Christians who believe that spiritual gifts are bestowed without regard for their genetic personalities, it is suggested that the believer's personality will be made to harmonize with the gifting process in order for the ministry to be spontaneous and effective.

b. For Christians who believe that spiritual gifts and natural talents are not essentially different, the explanation is that at the time of conversion, the natural aptitudes and environmentally influenced personality are returned to the New Born as spiritual gifts ready for ministry.

4. Almost all of the spiritual gifts clusters for both seminarians and the Filipinos include factors H^+ and Q_3^+ . This implies that most of the spiritual gifts categorized under the five clusters are utilized by active, responsible, friendly, and people-loving members, who also exercise self-control, persistence, consideration of others, and are respectful of social expectation.

5. The fact that the best prediction models of the

spiritual gifts clusters are unique for the two samples implies that predicting one's potential giftedness through exploring personality profiles must be normed for contrasting culture groups where there are significant differences in the way ministry is implemented; that is, one cannot generalize findings cross-culturally. For the seminarian sample, though it is true that the sample is a multi-racial group, in a broad sense they belong to one basic culture (which does not deny the presence of important racial subcultures), in that more than 70% of them are North American. Further discriminating demographic information was not available.

Recommendations

1. Conduct classes/seminars within churches to aid members in the understanding of ministry through spiritual gifts with a view to increasing the number of members involved in regular ministry.
2. Establish vocational guidance in churches and schools to help young adults in the selection of professions/vocations in line with their personality profiles and giftedness.
3. Utilize personality/giftedness information in recruitment for church employment.

For Further Study

1. Replicate the study in churches with its inbuilt spectrum of age groups.
2. Replicate the study with culturally homogeneous

groups.

3. Replicate the study with five groups that are relatively vocationally homogeneous.

4. Replicate the study investigating gender bias.

5. Compare spiritual gifts clusters, vocations, and personality profiles to investigate possible correlations.

6. Consider the practicality of developing a simple, self-scoring personality instrument that could be used in local congregations where cost and availability would make the use of the 16 PF impractical.

7. Consider ways to utilize this theory in the work of nominating committees in churches.

APPENDICES

APPENDIX A
CORRESPONDENCE

May 5, 1992

Dr. Miriam S. Tumangday
Vice President
Philippine Union College

Dear Dr. Tumangday:

One of my doctoral candidates, Soo Dong Choi, is presently conducting research on the possible relationship between 16 Personality Factor Questionnaire and spiritual giftedness.

This is an area in which no full-scale research has been conducted of which we are aware. This study will probably be of interest to every Christian student.

Mr. Choi needs 500 subjects for his study considering the number of factors in the 16 PF and spiritual gifts instruments he will be using.

Thus, if you could be of any help to Mr. Choi in arranging for him to use some of the students of your institution for this study, he and we would be extremely grateful.

With every good wish.

Very cordially yours,

Roy C. Naden, Ed.D.
Professor of Religious Education

AUG 25 '92 14:43

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PHILIPPINE UNION COLLEGE

School of Graduate Studies

"Quality & Mission"

OFFICE OF THE DEAN

August 24, 1992

Dr. Soo Dong Choi
Andrews University
Fax (616) 471-9751

Dear Dr. Soo:

The President's Council of Philippine Union College has approved your request to administer tests related to your doctoral requirements to 500 college students. I shall be on an accreditation assignment off campus on September 22-25, but will have someone assist you during your stay. Please let me know how else we can help you.

Sincerely yours,

A handwritten signature in cursive script, reading "Miriam S. Tumangday".

Miriam S. Tumangday
Vice-President for Academic Affairs
Dean, School of Graduate Studies

/lr

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APPENDIX B
DATA ON THE 836 SUBJECTS

SEMINARIAN DATA

Cols. 1-3 ID Number
 Cols. 4-13 NSGI Scores
 TEACHER=4-5 SHEPHERD=6-7 SUPPORTER=8-9
 COUNSELOR=10-11 LEADER=12-13
 Cols. 14-29 16PF Sten Scores (0=10)
 Col. 30 Gender (1=M 2=F)

1989/1990 -> 001 - 212
 1991/1992 -> 213 - 358
 1992/1993 -> 359 - 437

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APPENDIX C
CORRELATION MATRICES

APPENDIX D
THE 20 STATEMENTS OF THE NSGI
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